

Running head: DISCOVERING VALUE AND IMPACT

Discovering Value and Impact: Evaluating a new Art Therapy in Neuroscience and Medicine

Program

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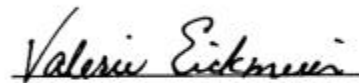


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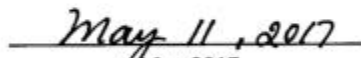


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ABSTRACT

This study is a mixed-method approach for evaluating a new Art Therapy in Neuroscience and Medicine (ATNM) program within an outpatient academic medical center that provides a range of medical and psychiatric services to individuals with neurologic and psychiatric conditions. The aims were to assess the value of the ATNM program and the impact it has on affecting depressive mood among individuals who were receiving art therapy services (N=15). The Patient Health Questionnaire-9 (PHQ-9) and Client Satisfaction Questionnaire-8 (CSQ-8) were used to obtain baseline data regarding depressive mood and client satisfaction. Patient demographics were gathered using the ATNM tracking system and the medical center's electronic medical record system to further understand the value and impact of the program. The preliminary data indicated an overall significant level of depression and anxiety among the referrals of patients having chronic neurological conditions. A high level of patient satisfaction and substantial benefit from art therapy intervention was noted in the results from the CSQ-8. Further evaluation of the program is recommended as an ongoing part of assessing the impact and value of the ATNM program.

Keywords: academic medical center, art therapy, depression, impact, neurology, program evaluation, satisfaction, value

DEDICATION

This thesis is dedicated to my graduate school cohort, E'lisa, Erica, Julie, Alex, and Kaitlin. Thank you for supporting me throughout these two years of graduate school. I imagine my experience would not have been quite as encouraging, honest, and fun without each of you. I would also like to dedicate part of my thesis to my family. Your consistent curiosity and trust in my ability to do anything I put my mind to has driven my journey, not just in graduate school but throughout my life. Also, Ellie, thank you for being with me each day to give me a sense of comfort and care.

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CHAPTER 1

INTRODUCTION

During the 1960s, program evaluation emerged as a method to track results of educational and social welfare initiatives that were federally funded (Hogan, 2010; Kaimal & Blank, 2015; Weiss, 1998). Similarly today, evaluation is a method of inquiry used to monitor compliance, track progress during implementation, and assess overall impact or outcome of a program. In addition, the purpose of program evaluation is to provide feedback that is useful for program staff based on the overall goals of the study, such as high participant satisfaction and improved participant behavior (Kaimal & Blank, 2015).

In order to collect useful feedback and determine the value or impact of a specific method of inquiry, program evaluation should be considered (Feen-Calligan & Nevedal, 2008). As evidenced based practices are increasingly emphasized in US health care, evaluation of programs becomes even more important. (Feldman, Betts, & Blausey, 2014; Brownson, Colditz, & Proctor, 2012, Fischer & Valley, 2000). However, evaluating and measuring success of mental health care is challenging because it is comparatively invisible to those of business professionals who have sales, athletes who have victories, and doctors who save lives. Mental health professionals, including art therapists, are increasingly confronted with the demand to show the evidence of their service. The purpose for many psychotherapy researchers is to make outcomes of mental health more visible (Leibert, 2006). In order to address this complex task, art therapist are advised to evaluate programs, which supports the need for conducting this study. The purpose of this study is to use evaluation tools to demonstrate the impact and value of a new art therapy program. For this study, impact is measured by change in behavior as indicated by

measurements of pre-post depressive severity and value is measured by satisfaction of the ATNM program.

Juliet King, Director of the Art Therapy program at the Herron School of Art and Design and Adjunct Assistant Professor in the Department of Neurology at the Indiana University School of Medicine, received funding from the Indiana Clinical and Translational Sciences Institute (CTSI) in Indianapolis, Indiana and Indiana University Department of Neurology to develop and implement an Art Therapy in Neuroscience and Medicine (ATNM) clinical program at the Indiana University Neuroscience Center (IUNC). The IUNC is an outpatient center for people who seek treatment for neurological and psychiatric disorders. Dr. Robert Pascuzzi, Chairman of the Department of Neurology at Indiana University School of Medicine and practicing physician, provides ongoing leadership supervision and insight in the development of the program. The funding for the program provides the support for Professor King to oversee the development of the program, provide administrative and clinical leadership, conduct supervision, and develop the organizational infrastructure necessary to establish an effective program. In addition, this writer, Maria Riddle, is responsible for conducting research and providing clinical service. This intern provides individual and group art psychotherapy for patients at the IUNC, leads inservices for staff, patients, and community members interested in learning more about art therapy, conducts experiential art therapy lectures, and engages in supervision. The internship also includes completing research for the purposes of evaluating the ATNM clinical program in order to demonstrate the impact and value of the services, which is the focus of this study.

The research and data collection will help meet the program's vision of being indispensable to the academic medical center in its commitment to provide optimal health care, medical education, and clinical research. Four hypotheses have been outlined; however, the

current study focuses on the primary hypothesis stated below which addresses the value and impact of the ATNM program since the research focuses on the beginning stages of development and implementation.

The primary hypothesis states that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program. The secondary hypothesis states that the implementation of an ATNM program will improve the clinical outcomes of patients and caregivers served in an academic neuroscience center. The tertiary hypothesis states that implementation of an ATNM program at an Academic Medical Center is a cost-effective complement to the clinical care of complex patients. The quaternary hypothesis states that physician buy-in and the establishment of a user-friendly referral and reporting system are essential factors that influence the successful creation of an art therapy program. The second, third and fourth hypotheses are being considered for future research by Professor King and Dr. Pascuzzi. The primary hypothesis states that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program.

A mixed methods approach was used to guide the collection of data. This approach involved the collection and analysis of data, integration of findings, and drawing inferences through qualitative and quantitative techniques (Tashakkori & Crewell, 2007). Wand, White, & Patching (2011) note there is not a gold standard for choosing a program evaluation method; however, practitioners are more successful in their pursuit to improve and adapt their programs if a qualitative and quantitative, or mixed methods, design is used (Wand et al., 2011). A mixed methods approach was chosen for this study for a three reasons. First, the IUNC currently uses a mixed methods approach to more fully understand their patients' needs. To stay in alignment

with the IUNC, the study reviewed literature and chose evaluation tools that collectively included a qualitative and quantitative design. Secondly, the patients at the IUNC are physically and intellectually able to complete both qualitative and quantitative measures. Therefore, participants in the study were able to independently complete the study which aids in maintaining confidentiality. Thirdly, in order to evaluate the program for a medical audience while gaining the most relevant information, as supported by research, both quantitative and qualitative measures were used. Overall, this study sought to collect a variety of data from multiple perspectives in order to capture the most valuable results – patient subjective experience and pre-posttest differences.

Patients included in this study are those referred for art therapy services from treating neurologists, psychiatrists and the art therapy team. The following instruments will be used to collect data and assess the impact of the ATNM program: The Patient Health Questionnaire (PHQ-9) (APPENDIX A) and a Client Satisfaction Questionnaire (CSQ-8) (APPENDIX B). The PHQ-9 was chosen as a behavioral outcome measure because depressive symptomatology is highly prevalent with people in this population (Price et al., 2011; Hellmann-Regen, 2013; Raskind, 2008), it is currently used at the IUNC, and it can display impact of a program by means of assessing the status of a patient through quantitative results. The CSQ-8 is a tool used to understand a patient's subjective experience, the value of the program and provides qualitative and quantitative information. The combination of these two components, PHQ-9 and CSQ-8, aimed to fulfill the purpose of this study – to use evaluation tools to demonstrate the impact and value of a new art therapy program.

Data was collected by the art therapy team, which includes this researcher and Professor King, throughout the time of this researcher's placement at the IUNC. The data was collected for

purposes of this study and for the development of the program, which extends beyond this study. With this in mind, a plan was developed and highlighted in this paper to inform the future data collection for the ATNM program. It is intended that the data collection and evaluation system will serve as an ongoing component to the program's infrastructure and allow for informed modification and program improvement.

Operational Definitions of Terms and Concepts:

Art Therapy: “Art therapy is a mental health profession in which clients, facilitated by the art therapist, use art media, the creative process, and the resulting artwork to explore their feelings, reconcile emotional conflicts, foster self-awareness, managed behavior and addictions, develop social skills, improve reality orientation, reduce anxiety, and increase self-esteem” (American Art Therapy Association, 2016).

Countertransference: An intense unconscious response from the therapist due to interactions with the patient. Often used in treatment to address the patient's relational interactions (McWilliams, 2004).

CSQ-8: The CSQ-8 is used to measure client satisfaction with services. It obtains the unique perspective of the clients' satisfaction with treatment (Attkisson, 2012).

Evaluation: Evaluation is a method of collecting data to examine value and impact. It is often used to assess the effectiveness of a program, determine the need for services, describe implementation, produce outcomes, address whether goals have been met, or obtain pertinent information to maintain the quality of a program (Feen-Calligan & Nevedal, 2008).

Evaluation Tool: To sufficiently collect data and evaluate a program, many types of evaluation tools have been created to highlight change occurring due to participation in a service,

understand subjective experiences of participation, and monitor productivity (Feldman et al., 2014).

Identity Confusion: For this paper, identity confusion is understood as a participant's need to explore their identity due to the changes in their life causing them to feel unbalanced and confused about who they are.

Identified Provisional Diagnosis: The provisional diagnoses identified in this paper are not used to diagnose the participants. When the term is used, it is referring to the results of the PHQ-9 and the participants' identified depressive symptomatology.

Impact: Impact can be seen as the way something is influenced by another. In order to show impact, some kind of change, whether positive or negative, is reported (Feldman et al., 2014). Throughout this study, a pre-post questionnaire was used as a primary way to show the impact of the program.

Outcome evaluation: Outcome evaluation considers changes made due to participation in a program or service (Sheppard, 2004). The data collected is compared against a standard or frequency of something occurring and considers what is changing as demonstrated by the participants' outcome measures (Feder & Feder, 1998). Researchers use quantitative evaluation with outcome evaluation to assess the impact of a specific intervention, program, or practice and how much these effects have reached the goals of the program.

PHQ-9: The PHQ-9 is a clinical assessment tool used to address specific Major Depressive Disorder criteria from the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition and has been tested for validity (Lowe, Kroenke, Herzog, & Grafe, 2004). The PHQ-9 serves as a dual-purpose instrument that measures depressive severity and provides a provisional depressive disorder diagnosis. The last portion of the questionnaire was added to

address how much the problems are affecting their day to day life. This item helps measure global functional impairment and is strongly correlated to quality of life measures (Kroenke, Spitzer, & Williams, 2001). For this study, the PHQ-9 is not used for diagnosing the participants but rather to provide a baseline measure for depressive symptomatology by establishing a depressive severity score and an identified provisional diagnosis (IPD).

Process evaluation: Process evaluation is concerned with quality of care as demonstrated by the participants' subjective experience regarding the service provided (Sheppard, 2004). Qualitative methods are often used with process evaluation. Qualitative methods do not use measurement, but instead they use intuitive and imprecise techniques. They tell us why the program is problematic or effective. The gathering of this data is more personal and no defined answer is required (Feder & Feder, 1998).

Therapeutic Alliance: An active therapeutic interaction and conscious collaboration between therapist and patient. Three features should be considered when addressing the therapeutic alliance: a bond developed, goals agreed upon, and assigned tasks (Hilsenroth, Peters & Ackerman, 2004).

Value: When something has value, it is seen as being useful, helpful, effective, and/or important. In order to show value, appreciation, enjoyment, and met expectations are often reported (Feen-Calligan & Nevedal, 2008). Throughout this study, a satisfaction survey was used as the primary way to reflect value.

CHAPTER 2

LITERATURE REVIEW

Program Evaluation

In the book, *Evaluation: A Systematic Approach*, Peter H. Rossi, Mark W. Lipsey, and Howard E. Freeman (2003) provide an overview of program evaluation. They define program evaluation “as a social science activity directed at collecting, analyzing, interpreting, and communicating information about the workings and effectiveness of social programs” (Rossi, Lipsey, & Freeman, 2003, p. 2). Social programs are defined as those built to help the human condition. Through evaluating a social program such as the one in this study, the results can be used to determine if the program should be continued, enhanced, and/or altered in order to increase effectiveness. Various applications are used to evaluate programs and are primarily distinguished by the goals of the participants being evaluated (Rossi, Lipsey, & Freeman, 2003). McDowell also discusses social indicators of health and the development of ways to collect data about social conditions. He describes using the indicators to “contrast differences in health between people, to diagnose illness, to predict the need for care, and to evaluate the outcomes of treatment” (McDowell, 2006, p. 10).

Further, Feder and Feder (1998) note that evaluation is a tool for gathering data on which to base decisions. To further their discussion on evaluation, they highlight five basic purposes of evaluation:

- (1) to ascertain the problems and needs of a person (a patient/client or a staff member), a program, or an institution;
- (2) to predict future behavior;
- (3) to monitor change;

(4) to know when to stop; and

(5) to learn how to improve treatment methods or techniques (p. 5).

Feder and Feder (1998) agree these purposes are not mutually exclusive or independent. For example, in order to establish the needs of a person, there must also be a way to know if change has taken place. Understanding the needs and patient behavior helps to understand when a patient is ready to terminate. With all of these functions in mind, one summative purpose for evaluation is defined: “to guide and direct treatment” (p. 5). A program that is evaluating its services must reach for improving treatment and have a clear idea of the purpose of evaluating the program.

To expand upon the purposes of evaluation, Holly Feen-Calligan, Coordinator of the Art Therapy Program at Wayne State University in Detroit, Michigan, along with Dana Nevedal, a student of Feen-Calligan, define program evaluation similarly from their study about an art therapy program that utilized a post-workshop evaluation survey to assess impact of a 10-week community art therapy workshop from the years of 1992-2006. They note evaluation is a technique used to determine value and often aids in assessing effectiveness, assessing the need for services, describing implementation, measuring outcomes, determining if goals have been met, and/or obtaining data to maintain the quality of the program (Feen-Calligan & Nevedal, 2008).

In sum, Rossi, Lipsey, and Freeman (2003), McDowell (2006), Feder and Feder (1998), and Feen-Calligan and Nevedal (2008), strive to inform their readers about program evaluation. They note that evaluation is used to inform the program, achieve its intended goals, and gather information pertinent to patient care and program services. These definitions and outlined

purposes of evaluation will be used to inform the study's purpose – to use evaluation tools to demonstrate the impact and value of a new art therapy program.

History of program evaluation. Program evaluation has been evolving since the 17th century, but it is only recently emerging as a modern development. It first became popular in education and public health prior to World War I. For example, during the 1930s, research methods were being utilized to gather information about literacy, occupational training programs, and infectious diseases (Rossi et al., 2003). During the 1960s, program evaluation emerged as a method to track results of educational and social welfare initiatives that were federally funded (Hogan, 2010; Kaimal & Blank, 2015; Weiss, 1998). From there, social research developed at a much higher rate and by the early 1970s evaluation research was a distinct field in the social sciences (Hogan, 2010; Rossi et al, 2003).

Policies have been made that increase the demand for effective health care service which in turn calls for program evaluation. In 1993, The National Committee for Quality of Assurance (NCQA) required accreditation of managed-care organizations as a result of increased demands from purchasers of insurance. These insurance companies sought to obtain information regarding quality of health care plans. In 1997, following this requirement, the NCQA accreditation of managed behavioral health care organizations had a larger influence on providers. It directly affected behavioral mental health care providers because they were required to begin documenting the value of their work in a variety of areas. These areas included: client satisfaction, clinical outcomes, and adherence to care guidelines. As a result, program evaluation, ongoing data collection, and quality improvement must be integrated into practice. An increase in the need for promising efficient services has placed tremendous pressure on providers to demonstrate the value of services (Steenbarger & Smith, 1996). Therefore, managed care

organizations and funding sources in mental health settings are increasing their demand for addressing accountability as a requirement for funding (Leibert, 2006). The evolution of program evaluation has led to an increase in mandated program evaluation and demonstration of effectiveness of care.

Art therapists began to study the impact of programs around the same time these changes in health care began. In 1998, P. Gussie Klorer and Megan Robb, both board certified art therapists who work for Southern Illinois University Edwardsville (SIUE), began a study to address the impact of Head Start, a federally funded school program that helps preschool children learn appropriate social-emotional and cognitive behavior. Evaluating the program was initiated by a U.S. Congress mandate that needed data to support the reauthorization of funding for Head Start. The results were released in 2010 with controversial findings. A recommendation was made to Head Start to further evaluate the impact of the program to generate higher statistically significant results.

Therefore, Head Start chose to continue evaluating the program using a survey that was generated by their Art Enrichment program, a collaboration between Head Start and the SIUE graduate art therapy program. At the end of each school year, for over 15 years (1998-2011), art therapy students collected data from teachers, assistants, and mental health coordinators. The data was collected from a survey comprised of a 10-point Likert scale and written responses were used “to collect information about program coordination and communication, children’s responses and behaviors, and an overall rating of the program” (Klorer & Robb, 2012, p. 183). An annual report is sent to the director of Head Start and the mental health coordinator to summarize and make recommendations for the future. Results during a 5 year period (2007-2011) indicate that “Art Enrichment is a program that supports Head Start’s federal mandates in

mental health, early childhood development, family partnerships, and community partnerships” (Klorer & Robb, 2012, p. 186).

For similar reasons, Saunders and Saunders (2000) studied outcome based research in order to satisfy the demand from funders to obtain quantitative information to document program effectiveness. The authors noted the importance of collecting demographics in order to understand how subgroups of participants were impacted differently. The researchers evaluated an art therapy youth program in Des Moines, Iowa from 1994-1996. In this study, pre-post evaluation tools were designed by the staff in order to collect data related to change in three areas: therapeutic relationship, symptomatic behavior, and goal attainment. Ninety-four youth completed the study with results indicating a significant positive impact after comparing intake scores with exit scores. Positive impact was seen in the clients’ increase of engagement with the therapists, the decrease in frequency and severity of behavior, and the high success rate of goal attainment (Saunders & Saunders, 2000).

As a result of the evolving use of program evaluation, many programs have sought using evaluation techniques to inform policy makers. Saunders and Saunders (2000) and Klorer and Robb (2012) are two art therapy programs that supported the use of evaluation and research to highlight the increase in demands and to demonstrate efficacy of the art therapy programs. It is valuable for the field of art therapy to continue researching and evaluating programs and will be further explored in this paper.

Benefits of program evaluation in art therapy. Many programs use evaluation to measure the benefits and effectiveness of the program. Recognizing what is beneficial for a program helps boost efficacy and in turn helps to identify the best services for those who seek it. The results from an evaluation study can be used to understand where improvements can be

made in order to reach the highest level of success for the program and to provide the best service for the individuals who are involved in the program. The results can also be used to demonstrate the impact of the program's service, shown by the results from studies that use evaluation tools to gather data (Feen-Calligan & Nevedal, 2008; Feldman et al., 2014; Saunders & Saunders, 2000; Klorer & Robb, 2012).

Often times, evaluated benefits of a program can be used to support the need for funding (Saunders & Saunders, 2000; Klorer & Robb, 2012; Feldman et al., 2014; Feen-Calligan & Nevedal, 2008). The value or impact of a program can be shown through quantitative results, such as pre-post questionnaires, to identify change due to the service (Saunders & Saunders, 2000; Feldman et al., 2014; Chandraiah, Anand, & Avent, 2012). In addition, surveys with open ended questions can be used to obtain subjective responses that reflect the value of the program (Klorer & Robb, 2012; Feen-Calligan & Nevedal, 2008). In some studies the use of both methods is beneficial because gathering information from multiple perspectives helps inform the program to a greater degree (Ewen et al., 2016; Wand et al., 2011). Feen-Calligan and Nevedal (2008) note that collecting data from the participants regarding the program helps bring the participants' perspective to the process. Also, adding to art therapy research provides the field with a better understanding of art therapy techniques and benefits. Overall, evaluation is important for gaining knowledge about the program, acquiring data to support development and improving the program's quality (Feldman et al., 2014).

Many of the articles above note the lack of art therapy publications that discuss and describe program evaluation and hope to add to the growing number of articles available to researchers (Feen-Calligan & Nevedal, 2008; Feldman et al., 2014; Kaimal & Blank, 2015; Orkibi, 2012). For example, Kaimal and Blank (2015) highlight how the evaluation of a program

adds to research in art therapy. Program evaluation may aid in data collection and analysis in the hopes to improve research practice, gain a better understanding of participant perspectives, include participants' in program planning, and document lessons. Anderson (2001) recognizes many benefits to conducting research, including "answering key questions about how and why art therapy works" (p. 134). Specifically for program evaluation, Feen-Calligan and Nevedal (2008) note program evaluation is more often used to study efficacy. However, "evaluation studies also can assess the need for program services, describe a program's implementation, measure outcomes, determine whether a program has achieved its goals, or gather information for the purpose of maintaining program quality" (Feen-Calligan & Nevedal, 2008, p. 177). Overall, increasing both research and program evaluation is beneficial to the field of art therapy and to art therapy programs.

Choosing an Evaluation Method

Upon recognizing the growing need and appealing benefits of evaluating a program, one must begin to determine a method of evaluation that is suitable to their program. Wand et al. (2011) recognize there is not a gold standard for choosing a program evaluation method; however, practitioners are more successful in their pursuit to improve and adapt their programs if a qualitative and quantitative, or mixed methods, design is used. To support Wand et al.'s (2011) mixed-methods approach, Sheppard (2004), Feen-Calligan and Nevedal (2008), Feldman et al. (2014) and Rossi et al. (2003) also note in order to find the value and impact of a program two forms of evaluation are considered: outcome evaluation and process evaluation. For this study, outcome evaluation tools were used to gather data that is quantitative and primarily demonstrates impact and process evaluation tools were used to gather data that is qualitative and primarily

demonstrates value. Mixed method designs incorporate both qualitative and quantitative techniques and were used for this study.

Summative and formative evaluation must also be understood in order to determine the best method for evaluation. In 1967, Michael Scriven, a key figure in the evaluation curriculum, defined summative and formative kinds of evaluation. Formative evaluation happens throughout the determined evaluation period. The data collected during this time highlights the changes seen in the patient and is meant to be used to make adjustments in the patient's care. Summative evaluation is conducted at the end of the evaluation period. The information gathered helps the program and gives the clinicians a chance to learn more from the experience. Many evaluation methods, including quantitative, qualitative, and mixed method, can be used for both formative and summative evaluation. The choice for whether the method is formative or summative is determined by the purpose of evaluation (Feder & Feder, 1998).

Beyond choosing the appropriate method, the specific evaluation tool must also be determined. Boyer and Kane (2010) outline the necessary qualities of evaluation tools in this manner:

To assess outcomes of health services, providers need brief, responsive, reliable, and valid measures that can be implemented in clinical settings with minimal costs and burden to everyone involved. To be effective in analyzing evidence-based practices, it is important that measurement tools be easy to use in terms of administration and time. Outcome measures must demonstrate both validity and reliability and be sensitive to change occurring over time. (p. 390)

Further, Kowitt et al. (1999) recommended four standards to consider when choosing an evaluation tool: utility, feasibility, propriety, and accuracy. These standards guided their choice

to pick a “practical and useful evaluation design, identify reliable and validated measures and feasible ways to deliver the measures, and report meaningful findings to all stakeholders” (p. 15).

Quantitative Methods. Quantitative methods of evaluation often tells us “what effect we are having (how much, where, who, when)” (Feder & Feder, 1998, p. 18). The data collected is compared against a standard or frequency of something occurring and considers what is changing as demonstrated by the participants’ outcome measures. Researchers use quantitative evaluation to assess the impact on participants of a specific intervention, program, or practice and how much these effects have reached the goals of the program (Feder & Feder, 1998). For example, Feldman et al. (2014) used pre-post outcome evaluation tools to understand the impact of an art therapy program on depression and quality of life. The changes from pre to post evaluation suggested that participation in art therapy helps decrease depression and, therefore, shows a positive impact of the program. Ultimately, outcome evaluations can be used to look at ways to improve methods for patient care (Sheppard, 2004).

The measurement, often numbers, is typically used to describe something objectively – meaning the data is a fixed set of numbers that leave little room for judgment. However, judgment is used when determining what and how it is measured (Feder & Feder, 1998). When choosing something to measure, it is appropriate to choose a behavior based on the prevalence of the behavior among the participants (Kowitt et al., 1999). For example, Kowitt et al. (1999) studied an art therapy program for refugee youth from Burma. They selected four outcome measurement tools that addressed common challenges the participants faced due to being a refugee: depression and anxiety, self-esteem, trauma, and school-based behavioral problems regarding social and emotional regulation.

A few sources may be used to collect data for outcome evaluation which include but are not limited to: records, responses to questionnaires or interviews, observations, standardized tests and physical measurements (Rossi et al. 2003). For example, Saunders and Saunders (2000) used records, observations and interviews to evaluate an art therapy program for youth. Records were kept regarding their participation in the program. Observations were made about the participants' abilities; for example, did the youth maintain eye contact? Were they able to accept redirection or express themselves verbally? Interviews were taken in order to gather information about history and current challenges with behavior. These three forms of data were collected pre and post participation in the program to gather quantitative results. Ninety-four youth completed the study with results indicating a significant positive impact after comparing intake scores with exit scores. Positive impact was seen in the clients' increase of engagement with the therapists, the decrease in frequency and severity of behavior, and the high success rate of goal attainment (Saunders & Saunders, 2000). Many other articles were noted to use pre-post methods to obtain outcomes measures (Feldman et al., 2014; Chandraiah et al., 2012; Ewen et al., 2016; Wand et al., 2011).

Standardized pre-post questionnaires and surveys are identified as appropriate tools to use to evaluate programs. They are a quick method to collect data and may be taken more than once to evaluate change throughout therapy. They can be self-administered, preferably at the beginning of treatment and after termination, which helps track improvement (Steenbarger & Smieth, 1996). It is valuable to use a self-administered, brief questionnaire to provide ease of completion and to maintain confidentiality. Feldman et al. (2014) evaluated an art therapy service using two pre-post questionnaires: The PHQ-9 to assess depression severity and the Short Form Health Survey (SF-12) to assess quality of life. Each participant completed a baseline, pre-

test and a 6-month post-test follow up to track change. The changes from pre to post evaluation suggested that participation in art therapy helped decrease depression.

Another way to quantify program impact is to use satisfaction surveys with a Likert scale. Fischer and Valley's (2000) article highlighted the development and use of a quantitative survey instrument for collecting participant feedback regarding quality and effectiveness of services. The use of the survey in-process allowed the client to reflect on the service without losing insight due to the passing of time.

Throughout the process, the survey was modified to appropriately structure questions and responses. For example, a three-point scale (Yes, No Opinion, and No) was replaced with a five-point scale (Strongly Agree, Agree, Neutral, Disagree, and Strongly Disagree). They recognized there may be a likely gradation of views between clients and therefore added more response choices. Limiting their choices may have led to incomplete agreement. The survey was completed anonymously in order to allow for freer responding. The questions on the survey addressed: preparation to deal with life situations, understanding their situation, communication, and feeling better. These questions were analyzed with the number of sessions attended: 1 session, 2-5 sessions, 6-10 sessions, and 11+ sessions. The percentage of agreement was highest at 6-10 weeks for communication and feeling better with over 90% agreeing in each category. The lowest percentage was seen in all the number of sessions for preparation with approximately 66-75%.

PHQ-9. The PHQ-9 has been recognized as an effective tool to use for pre-and post-evaluation. In addressing outcome measures regarding behavior change for patients with neurological disorders, depression is considered a major factor. In literature, depression is found to be highly prevalent in patients with neurological disorders (Price et al., 2011; Hellmann-

Regen, 2013; Raskind, 2008). The most common neurological disorders accompanied by depression include Alzheimer's disease (AD), stroke, Parkinson's disease (PD), multiple sclerosis (MS), and epilepsy. Depression affects 50 percent of individuals with PD and is noted as the most common non-motor concern (Abuhoff, Goldblatt, Gaydos, & Convery, 2013). Additionally, depression or depressive symptomatology is reported to affect approximately 30 percent of patients with AD (Van der Mussele et al., 2013). Price et al. (2011) notes depression is prevalent in 20-72 percent of patients after they experience a stroke, 19-54 percent of patients with MS, and up to 55 percent for patients with epilepsy. Paul, Cohen, Goldstein and Gilchrist (2000) acknowledge the prevalence in patients with Myasthenia Gravis as well. Overall, many people with neurological disorders are often diagnosed with depression. It is noted that poorer quality of life, impaired rehabilitation, higher distress for relationships, poorer medication compliance, and for some higher mortality are outcomes of depression (Price et al, 2011). "The goal of depression treatment in patients with neurologic disorders is relief of affective symptoms and improved functioning, with consequent decrease of patient and caregiver burden and maximization of resources available for coping with the neurologic condition" (Raskind, 2008, p. S28-S29).

The PHQ-9 is currently being used in a variety of outpatient mental health settings, including the IUNC. The benefits of this evaluation tool are that it adheres to the current standards of care at the center. Further, in alignment with Boyer and Kane's (2010) recommendations for choosing an evaluation tool, the PHQ-9 is considered appropriate to evaluate programs because it can be administered and scored within minutes and can be administered multiple times. Feldman et al. (2014) utilized the PHQ-9 in their study and found it to be effective in evaluating patient behavior. In another article, Watzke, Heddaeus, Steinmann,

Konig, Wegscheider, Schulz, and Harter (2014) developed a study protocol to examine the effectiveness and cost-effectiveness of a stepped treatment model for depressed patients through measuring change in depressive symptoms using the PHQ-9. An intervention group of 660 patients and a controlled group of 200 patients are intended to complete the questionnaire four times throughout a one-year period. The stepped model aims to improve health care, care provider interaction with patients, and delivery of treatment for patients with depression. The model also plans to obtain secondary outcomes which include response, remission, relapse, quality of life, feasibility of the model, acceptance of the model, costs, and cost-effectiveness. These secondary components are viewed as important elements in the treatment of depression.

Qualitative Methods. In contrast to quantitative methods, Feder and Feder (1998) note qualitative methods do not use measurement, but instead they use intuitive and imprecise techniques. They tell us why the program is problematic or effective. Descriptive approaches are commonly used for qualitative methods. The gathering of this data is more personal and no defined answer is required. Some researchers believe the subjective quality of qualitative methods is more aligned with the uniqueness of each individual and that objectivity is limited in understanding a person. While the bias in qualitative methods is more obvious, due to its subjective nature, a researcher must become more aware of what is causing these biases and how it informs the data (Feder & Feder, 1998).

Process evaluation is concerned with quality of care as demonstrated by the participants' subjective experience regarding the service provided (Sheppard, 2004). Kowitt et al. (1999) also define process evaluation by saying "process evaluation focuses on documenting how programs are delivered, identifying barriers to implementation, and understanding how outcomes may have resulted from the intervention" (p. 14). Examples from their study of process indicators include

verbal responses that acquire feedback for future consideration of evaluation design. Feen-Calligan and Nevedal (2008) obtained results through process evaluation using written responses. For example, a response to “What did you like about the Art Therapy Workshop?” was related to feeling supported during the art-making process. Taking into consideration the impact of written and/or verbal responses further explored the value of a program. Lastly, Feldman et al. (2014) collected data about the art therapy service which included patient sociodemographic characteristics, service utilization and frequency of sessions. Based on the literature, written responses, verbal responses, tracking of patient demographics and patient involvement are all considered valuable ways to gather process evaluation data.

The use of surveys is identified as a common process evaluation tool. Client satisfaction surveys are frequently used to assess subjective experience of patients receiving mental health services. Fischer and Valley (2000) noted satisfaction surveys are especially beneficial in the field of human services due to the increased need for validation of effectiveness of practice by managers and practitioners. Establishing a service that can be monitored and improved often guides the development of mental health agencies. Satisfaction surveys take on three types which change during the span of counseling including: in-process survey, survey at termination, and follow-up survey. Satisfaction surveys include questions regarding the client’s perspective of the service (e.g., location, consideration of staff, and ease of scheduling) and the effectiveness of the service (e.g., how beneficial the treatment was in managing the client’s presenting problem). Steenbarger and Smith (1996) also noted that client satisfaction is the most common measure of quality encountered in therapeutic settings. It is important that instruments are standardized and developed for specific settings in order to avoid the common questionable shortcomings of surveys.

A limitation of surveys is that it addresses how a client “feels” in relation to the service which is different than pre-post questionnaires that focuses on the “degree” of improvement in relation to the service. In an effort to address this limitation, it is important to include both client satisfaction surveys and pre-post questionnaires. The benefits include that they are quick to administer, easy to score, and can be administered once (Steenbarger & Smith, 1996).

Mixed Methods. Feen-Calligan and Nevedal (2008) recognize the greater significance often placed on outcome evaluation from stakeholders, but ideally both process and outcome measures are necessary for overall program evaluation. As mentioned before, Wand et al. (2011) noted practitioners are more successful in their pursuit to improve and adapt their programs if a qualitative and quantitative, or mixed methods, design is used. Wand et al. (2011) note:

Quantitative and qualitative findings can be considered ‘integrated’ to the extent that these components are explicitly related to each other within a single study, and in such a way to be mutually illuminating and thereby producing findings that are greater than the sum of their parts. (p. 202)

It is also important to note “the manner and means of service provision is important, perhaps regardless of outcome. The participants may not see a decrease in behavior but speak highly of the intervention.” (Sheppard, 2004, p. 199). Intervention can also be understood as the overall program. It is valuable to also evaluate the overall program because every part of treatment can be equally as important as a specific intervention. All the elements inform treatment and therefore need to be evaluated.

Further examination may seek to relate process evaluation to outcome evaluation by asking how much the service is affecting change regarding clinical behavior or satisfaction (Sheppard, 2004). Upon gathering outcome measures, a patient’s subjective experience may

enhance the results with further exploration of who is benefiting and what is aiding in the process. The process of triangulation is key in determining maximum value of the program. For example, the pre-post outcome evaluation tool will gather quantitative data that can be paired with subjective written comments from a satisfaction survey that may further validate their experience.

A mixed method design is described in an article by Wand et al. (2011). The study evaluated an outpatient emergency service using two self-report measures, a client satisfaction tool, and an interview. Levels of psychological distress and general self-efficacy were measured using standardized tools. The satisfaction tool used a Likert scale to demonstrate quantitative findings. The program was evaluated twice with 6 months in-between each round of evaluation. Fifty-one participants indicated overall that they felt positively about the outpatient service with a few results indicating less satisfaction and 66% reported “very high” psychological distress at baseline with a decrease in mean score to “moderate” psychological distress. Descriptive information about each participant was also gathered which includes waiting time during appointments, number of sessions attended, medication status, and number of referrals. Using evaluations helped the program explain the array of outcomes possible and highlight the factors that contribute to successful implementation.

Similarly, Schlosnagle, McBean, Cutlip, Panzironi, and Jarmolowicz (2014) used a satisfaction survey, a quality of life survey, and an outcomes survey to aid in improving the Fine Arts Program at the Center for Excellence in Disabilities. Eight participants were included in this study. The satisfaction survey and outcomes survey included both quantitative and qualitative questions. A Likert-type scale was used to quantify results and open-ended responses were completed for qualitative findings. The Quality of Life survey only gathered quantitative results

using a Likert scale. Demographics and daily activities were also considered relevant to evaluating each participant's involvement in the program. This information was used to monitor change occurring outside of the home and to assess improvement and/or decline. Overall, participants felt they benefited from participating in the program.

“The combination of quantitative measures with qualitative analysis provides insights into people's experiences of health care, enhancing interpretation and explanation and exposing the shortcomings of standard clinical outcome measures” (Wand et al., 2011, p. 200). A mixed-methods design, in short, supports gathering conclusions from multiple aspects of a given study for more integration (Wand et al., 2011). Overall, the literature highlights the significance of both qualitative and quantitative methods and ultimately notes using both as the most effective method.

CSQ-8. In order to gather data using a mixed method design, the CSQ-8 is considered. The CSQ-8 is a program evaluation tool used to evaluate community mental healthcare services (Matarazzo et al., 2014; Attkisson & Zwick, 1982; Gatson & Sabourin, 1992; Nguyen, Attkisson, & Stegner, 1983). It was first developed in response to the growing demand for standardized instruments, replacing untested, idiosyncratic tools. The goal was to allow for measurement of general satisfaction across a variety of health services. Items include questions about participants' opinions about the service they received or currently receiving, allowing for middle and end of treatment administration. Total scores for the CSQ-8 can range from 8-32, with higher scores reflecting higher satisfaction.

Brief descriptions of the CSQ-8 being implemented in studies are outlined here. Matarazzo et al. (2014) assessed patient satisfaction using the CSQ-8 during a post-treatment follow-up visit. This study justifies using this tool because of its frequent use in evaluating

community mental healthcare. In this study the mean score was 26.5 (SD = 4.44, Range – 17-30). Perreault and Leichner (1993) tested 263 outpatients at a psychiatric center using two satisfaction scales, including the CSQ-8. The results of this study helped the researchers understand the services provided from the viewpoint of the participants. Each of these articles valued a mixed-method approach with the appreciation for patient satisfaction.

CHAPTER 3

METHODS

A mixed methods approach was used to guide the collection of data. A mixed methods approach involves the collection and analysis of data, integration of findings, and drawing inferences through qualitative and quantitative techniques (Tashakkori & Crewell, 2007). The purpose may be to generate commonalities through the triangulation of data (Teddlie & Tashakkori, 2003). For example, the results from the PHQ-9 contained quantitative data that can be reflected onto the results from the CSQ-8 that contained quantitative and qualitative data and further reflected onto the demographic information from a Data Collection Form (DCF) (APPENDIX C). The combined results formed the third component to the triangulation of data. This third branch of data informed how quantitative information may/or may not influence qualitative information – the participant's depressive severity may affect their satisfaction and alternatively, satisfaction may affect their depressive severity.

Johnson, Onwuegbuzie, and Turner (2007) expanded on the purposes of mixed methods design by highlighting five key elements:

(a) triangulation (i.e., seeking convergence and corroboration of results from different methods studying the same phenomenon), (b) complementarity (i.e., seeking elaboration, enhancement, illustration, clarification of the results from one method with results from the other method), (c) development (i.e., using the results from one method with results from the other method), (d) initiation (i.e., discovering paradoxes and contradictions that lead to a reframing of the research question), and (e) expansion (i.e., seeking to expand the breadth and range of inquiry by using different methods for different inquiry component). (p. 116)

These five elements informed the use of two standardized tools, when combined make a mixed method design: the PHQ-9 and the CSQ-8.

Data was collected concurrently and independent from one another; final implications were influenced by all the results (Mertens, 2014). This study was a mixed methods design because multiple forms of data are collected simultaneously for ease of participation and time limitations. Using a mixed methods design supported the need to collect and analyze data to answer one hypothesis (Teddlie & Tashakkori, 2003). The study's hypothesis stated that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program. In order to answer this hypothesis, both tools needed to be included.

Using a similar framework from Ewen et al. (2016), a mixed-methods design was implemented. Three components were considered: the participant's demographic information, the helpfulness of the program, and the participant's satisfaction. Demographics were collected using the DCF to understand who accessed the program and how participants engaged in treatment. The PHQ-9 was used to gather information about the helpfulness of the program, using a pre-post study design. Client satisfaction was measured using an evaluation tool that informed satisfaction and allowed for client written feedback (See Table 1).

Table 1. Summary of Evaluation Questions, Measurement Tools, and Domains Assessed Included.

Who Accesses the ATNM program?	Is ATNM helpful?	Are Clients Satisfied with ATNM?
Characterize sample based on information via DCF and tracking system	Compare baseline scores to follow-up scores on the PHQ-9	Assessed post program with the CSQ-8

Search Criteria

While collecting literature to generate an understanding of program evaluation and related topics, journal articles, websites and books were utilized. PsycINFO and EBSCOhost were the primary databases used to research literature. Google Scholar was also used to collect research articles. Books were obtained from Indiana University Purdue University-Indianapolis' University Library through IUCAT. Studies were included that addressed evaluation of art therapy and mental health programs, evaluation tools, history of program evaluation, types of evaluation methods and tools, and neurological disorders.

Table 2. Search Terms and Electronic Databases

Combination of Search terms				Electronic Databases
Art therapy	Mental health	Outpatient	Evaluation	Google Scholar EBSCOhost PsycINFO
Mental health	Outpatient	Evaluation	"Program	
Neurological disorders	Evaluation	PHQ-9	Evaluation"	
Evaluation tool	Depression Satisfaction	CSQ-8		

Table 3. Resources

Resource Type	Quantity	Percentage of Total Resources
Peer-Reviewed Journals	32	78.05%
Books	8	19.51%
Websites	1	2.44%
Other	1	2.44%
Total	41	100%

Table 4. Publication Dates of Resources

Publication Date	Number	Percentage
2010-2016	20	48.78%
2000-2009	15	36.59%
1990-1999	4	9.76%
1980-1989	2	4.88%
Total	41	100%

Setting

The study was conducted at the IUNC and housed in the neurology department in designated art therapy rooms.

Art Therapy Team and Services

The art therapy team included this writer, a second-year art therapy graduate intern from the Herron School of Art and Design, and Professor King, Director of the Art Therapy program at the Herron School of Art and Design and Adjunct Assistant Professor in the Department of Neurology at the Indiana University School of Medicine. Art therapy referrals began at the IUNC in late August of 2016. Services are offered three days a week in accordance with this writer's internship schedule: Monday, Thursday and Friday. Individual sessions were available starting in August of 2016 and group art therapy sessions were available starting in March of 2017. Information about the services was provided to patients, IUNC staff, and the community via personal communication, art therapy presentations, and written statements.

Recruitment

Patients included in this study are those referred for art therapy services from treating neurologists, treating psychiatrists, the ATNM team, or through self-referral who are 18 years or older. Any patient younger than 18 was assisted by a guardian. Patients were asked to participate in the research by the art therapy team: (1) during their first art therapy session or (2) during a returning art therapy session.

Procedure

This study was approved by the Institutional Review Board of Indiana University prior to beginning any data collection.

This writer and Professor King were responsible for administering the study. During a one-on-one art therapy session, each participant was asked, by their designated administrator, to participate in this study. A verbal statement was made about what to expect from participation (Refer to statement about recruitment in Appendix D).

Upon agreement, the requirements of the study were reviewed with the participants and then the Consent Form (Appendix E) and Health Information Authorization Form (Appendix F) were signed. The PHQ-9 (Appendix A), CSQ-8 (Appendix B), and DCF (Appendix C) were completed independently. A few participants with writing challenges completed the DCF with the intern before working on the other two forms independently. The CSQ-8 was completed only after a participant had attended three or more art therapy sessions. The forms were completed: (1) at the beginning of the session; (2) during the last 20 minutes of the session; (3) after the session in an art therapy room; and (4) at home. The five forms were stored together in an envelope with each form and the envelope corresponding to one number. The number was

assigned to the participant in order to give the patient their same envelope back during post-test administration. Completion dates of the forms were recorded per participant via a written log.

Data Collection

The administration of this study happened in two parts. The first part of the study was conducted in February and March of 2017. During this time, each participant completed the required components of the PHQ-9, CSQ-8, and DCF. The results were gathered at the beginning of April of 2017 and reported in this paper as a preliminary study and as an indication of baseline results. The second part of the study will be conducted at a later date and not reported in this study due to the timeline of this writer's education. However, recommendations for future evaluation are outlined in order to continue evaluating the program. Any new referral will be invited to participate in evaluating the program as an ongoing component to assessing this program. The administration of the evaluation tools is outlined below in Table 5.

Table 5. Administration of Evaluation Tools and Special Instructions

Administrator	Date of Administration	Evaluation Tool	Special Instructions
This writer and Professor King	2.23.17-3.31.17	PHQ-9	
		CSQ-8	Participants must attend 3 or more sessions prior to administration
		DCF	Only complete top portion of form
Future	Ongoing with new participants	PHQ-9	Must be completed 3 months prior to PHQ-9 post-test
		CSQ-8	Participants must attend 5 or more sessions prior to administration
		DCF	Only complete top portion
	During the last month of the study (recommended in August 2017) or with any participant exiting treatment	PHQ-9	Must complete PHQ-9 pre-test 3 months prior
		CSQ-8	Must be 3 months since last administration of CSQ-8
		DCF	Complete bottom portion of form

Study Forms and Measures

The following questionnaires and forms were administered during a one-on-one art therapy session and independent of the therapist/intern: the CSQ-8, PHQ-9, and DCF. The tracking system's information was gathered separately by the administrator.

Satisfaction survey. The CSQ-8 was used to assess satisfaction with the program and services to assess overall patient satisfaction. The survey was self-administered to art therapy patients who attended three or more sessions in February and March of 2017. It is common for surveys to be administered after participation in a service, in order to gather information about the participants' full experience and after they have gained an understanding of the service (Fischer & Valley, 2000; Feen-Calligan & Nevedal, 2008). The data collected on program

satisfaction was used to improve implementation of art therapy services and the study process. In addition, data was used to reflect the value of the service. The CSQ-8 was chosen for this study because it is self-administered, brief, reliable and internally consistent. In addition, evaluating client satisfaction was important to understand the subjective experience of the participants included in the study.

Pre-Post questionnaire. The PHQ-9 is an outcome measurement tool that was used to collect data about change in mood. The questionnaire was self-administered at the beginning of the study. It was recommended to administer a post-test as a follow-up evaluation to the patients who completed the pre-test to assess change in mood over time. It is noted in literature that pre-post questionnaires are administered multiple times in order to gain full understanding of overall change (Feldman et al., 2014; Kowitt et al., 1999; Saunders & Saunders, 2000). If a patient completed the pre-test around or after recommended post-test time, they still completed the PHQ-9 in hopes for the data to be ongoing. Depending on when a participant began art therapy, some participants completed the pre-test in the middle of their treatment and others completed the pre-test during their first session.

The PHQ-9 was not being used to diagnose the patients with depression. The scores were used as a baseline score for depressive symptomatology and assessed change in mood. The severity and identified provisional diagnosis (IPD) were both used to assess each participant.

DCF. The DCF was created by this writer for the purposes of this study and was used to collect patient demographics and clinical information (See Appendix C). Data collection strategies, utilized by Feldman et al. (2014) and Kaimal and Blank (2014), aided in the development of the form. The information was gathered at the beginning of the study and at the end of the study to monitor demographic changes alongside PHQ-9 changes in scores. The

information provided reflected how subgroups of patients may respond differently to the program based on their individual experiences. It also provided information about who demographically comes to therapy.

Tracking system. To supplement the DCF, a tracking system was developed to further explore patient demographics. Throughout the time of the ATNM program, information was collected regarding the number of referrals to the program, chief complaint based on primary art therapist reasoning, patient diagnosis, and attendance to individual appointments. The Electronic Medical Record System (EMRS) and art therapy notes were used to report this information. The Health Information Authorization Form (Appendix E) was used to gain consent to gather the information from the EMRS. The information gathered was used to compare the therapist's perspective of the patient's treatment to patient's perspective (obtained through the DCF). For example, the therapist may have reported the patient was in therapy for identity confusion while the patient may have noted on the DCF, they were in treatment for anxiety. The differences and similarities helped inform how health information was communicated among patient and health care teams and addressed the therapeutic alliance among participants. It was also used to recognize what was valuable to the patient versus the therapist. While this study did not expose which patient did and did not align with their physician's referral and therapist's recorded chief complaint, it did provide information about the patient and therapist alignment which informs how the patient perceives therapy and whether they are in agreement with their therapist about the reasons for being in treatment.

It was hypothesized that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program.

Data Analysis

Data analysis was used to determine scores and IPD for the PHQ-9, scores and themes from the written comments for the CSQ-8 and to make comparisons between different components from the DCF, PHQ-9, and CSQ-8.

PHQ-9

To identify a provisional depression diagnosis, see Table 6. If the results did not fit within these criteria, then no depressive disorder was considered.

Table 6. PHQ-9 Interpretation of IPD

	Major Depressive Disorder	Other Depressive Disorder
Number of responses in the shaded* section (one of which corresponds to Questions 1 or 2)	At least 5	2-4
*Questions 1-8 shaded sections include column “2” or “3”; Question 9 shaded sections include column “1”, “2”, or “3” (see Appendix A).		

To determine depression severity, add the total points for each of the columns separately. The total score after adding the column points equaled the severity score. Next, review the severity score using Table 7 to indicate the severity based on the score. Scores range from 0-27.

Table 7. PHQ-9 Interpretation of Severity Score

PHQ-9 Severity Score	Severity of Depression
0-4	Minimal
5-9	Mild
10-14	Moderate
15-19	Moderately severe
20-27	Severe

CSQ-8

To analyze the CSQ-8 quantitative data, first add up the total score to produce a range from 8 to 32. High scores indicated greater satisfaction. For the use of this study, further requirements were added to indicate satisfaction; the results that endorsed responses only in the “3” and “4” columns were considered a satisfied score. For the written comments, thematic coding was used to understand what elements of the ATNM program were most significant to the participants. Themes and elements of the program that were mentioned were both coded to reflect the significance.

Comparative Analysis

Comparative analysis was used to identify a correlation between five components: satisfaction, depressive severity, provisional depression diagnosis, number of sessions, and attendance. IUanyWare was used to access Statistical Analysis Software (SAS) that graphed and analyzed the data using a Fisher’s exact test and FREQ Procedure. Due to the small sampling, the data was used to discover the normality and baseline of the data and represented an

exploratory statistical analysis. Each component was compared to all other components. A total of ten comparisons were analyzed.

CHAPTER 4

RESULTS

The purpose of this study was to use evaluation tools to demonstrate the impact and value of a new art therapy program. The study's hypothesis stated that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program. The results reported in this paper were only from the pre-test with ongoing data collection recommended to complete the evaluation.

Participants

Of 72 patients from the IUNC referred to art therapy from the end of August until the end of March, 28 (38.89%) were in art therapy for treatment of a variety of neurological and psychiatric disorders during the time of the study. Table 8 provides a number of these disorders based on the data from the study. Of those 28, 15 (53.57%) were part of this study. Explanations for not participating in the study were: a) patient was not seen during the time period of the study (4; 14.29%), b) patient was not asked to be in the study (4; 14.29%), and c) patient was only part of group therapy which began at the end of the study period (4; 14.29%). The sample of the patients in the study is described in Table 8, Table 9, and Table 10.

The first set of demographic characteristics is outlined in Table 8 and was obtained using the DCF. The majority of individuals who participated in the study were female (60%) and Caucasian (100%). The median age for participants was 50 (SD=20) and the most common age range was between the ages of 59 and 79 (40%). The median number of art therapy sessions completed before partaking in the study was 8 (SD=4). The frequency of art therapy was more often weekly (47%) or biweekly (47%). It was more common for participants to not be in additional therapy outside of the ATNM program (60%) and on medication (93%).

Diagnoses were obtained using the EMRS and the DCF and reported in Table 9. The total number (n) of diagnoses was greater than the total number of participants because of the prevalence of dual diagnosis. According to the electronic medical record system (EMRS), eleven of the participants had multiple diagnoses, making the total number of diagnoses seen by the art therapy team equal to 16. In contrast, five of the participants, as indicated by the Data Collection Form (DCF), reported having multiple diagnoses, making the total number of diagnoses seen by the art therapy team equal to 12. According to the EMRS, depression (60%) and anxiety (40%) were the most common diagnoses among the participants. On the contrary, it was more common for participants to not report a diagnosis (27%). The top reported diagnoses from the DCF aligned with the EMRS with depression (20%) and anxiety (20%) as the most common diagnoses.

The participants' chief complaints were obtained using the therapists' notes and the DCF and reported in Table 10. The total number (n) was greater than the total number of participants because three chief complaints were reported by the therapists for each participant and three of the participants, as indicated by the DCF, reported having multiple chief complaints. According to the therapists, identity confusion (47%) and past trauma affecting current functioning (40%) were the most common chief complaints among the participants. On the contrary, it was more common for participants to not report a chief complaint (27%). The top reported chief complaints from the DCF were depression (27%) and health effects of diagnosis (13%).

Table 8. *Demographic Characteristics for Study Participants (N=15)*

Characteristic	M (SD)	n	%
<i>Age</i>	50 (20)		
17-37		5	33%
38-58		4	27%
59-79		6	40%
<i>Gender</i>			
Male		5	33%
Female		9	60%
Gender Fluid		1	7%
<i>Race</i>			
Caucasian		15	100%
<i>Number of art therapy sessions*</i>	8 (4)		
8 or more		7	47%
7 or less		8	53%
<i>Frequency of art therapy</i>			
Weekly		7	47%
Bi-weekly		7	47%
Monthly		1	7%
<i>Currently in other therapy</i>			
Yes		6	40%
No		9	60%
<i>Currently on medication</i>			
Yes		14	93%
No		1	7%
*Prior to partaking in the study			

Table 9. *Diagnoses Recorded Versus Diagnoses Reported*

Characteristic	n	%
<i>Diagnosis obtained from EMRS*</i>		
Depression	9	60%
Anxiety	6	40%
R/O Conversion Disorder	4	27%
Myasthenia Gravis	3	20%
Muscular Dystrophy	2	13%
Parkinson's Disease	2	13%
Borderline Personality Disorder (BPD)	2	13%
Post-Traumatic Stress Disorder (PTSD)	2	13%
Traumatic Brain Injury (TBI)	1	7%
Bipolar Disorder	1	7%
Autism Spectrum Disorder	1	7%
Alzheimer's Disease	1	7%
Lupus	1	7%
Fibromyalgia	1	7%
Tardive Dyskinesia	1	7%
Periodic Paralysis	1	7%
<i>Diagnosis obtained from the DCF**</i>		
No Response	4	27%
Depression	3	20%
Anxiety	3	20%
Muscular Dystrophy	2	13%
Parkinson's Disease	2	13%
PTSD	2	13%
Bipolar Disorder	1	7%
TBI	1	7%
Myasthenia Gravis	1	7%
BPD	1	7%
Fibromyalgia	1	7%
Severe Migraines	1	7%
Periodic Paralysis	1	7%
*Eleven of the participants have records for multiple diagnoses		
** Five of the participants reported multiple diagnoses		

Table 10. *Chief Complaint Recorded Versus Chief Complaint Reported*

Process Indicator	n	%
<i>Chief Complaint as reported by primary therapist*</i>		
Identity confusion	7	47%
Past trauma affecting current functioning	6	40%
Fears related to diagnosis	5	33%
Difficulty with expressing emotions	5	33%
Difficulty adjusting to changes	5	33%
Isolation	3	20%
Communication skills	3	20%
Engagement	3	20%
Poor quality of life	2	13%
Grief	1	7%
Maintain health	1	7%
Hopelessness	1	7%
Fatigue	1	7%
Family Stressors	1	7%
Reality Testing	1	7%
<i>Chief Complaint obtained from the DCF**</i>		
No Response	4	27%
Depression	4	27%
Health effects of diagnosis	2	13%
Anxiety	1	7%
Doctor recommended it	1	7%
Stress making symptoms worse	1	7%
Slow/prevent decline of diagnosis	1	7%
Fragmentation and dissociation of life elements	1	7%
Fears related to diagnosis	1	7%
Relationships	1	7%
Trauma	1	7%
Movement Disorder	1	7%
*Each participant had three reasons for therapy and were logged after their intake session		
**Three of the participants reported multiple reasons		

PHQ-9

The level of severity and IPD are reported together in Table 11 and graphed in Figure 1 and Figure 2. The level of severity ranges from minimal to severe and the IPD include major depressive disorder, other depressive disorder, and no depressive disorder. In Table 11,

“frequency” represents the total number of participants that indicated results for both the Severity Score and IPD. “%” represents the total percent based on total frequency (n=15). Of the participants’ combined severity scores and IPD, three (20%) indicated severe major depressive disorder, 1 (6.67%) indicated moderately severe major depressive disorder, 2 (13.33%) indicated moderate major depressive disorder, and 1 (6.67%) indicated moderate other depressive disorder. The most common response was moderately severe without a depressive disorder (4; 26.67%).

Figure 1 and Figure 2 show the results independently. Moderate severity was the most common response (7; 46.67%) and no depressive disorder was the most common IPD (8; 53.33%).

Table 11. *PHQ-9 Pre-Test Results: Severity Score versus Identified Provisional Diagnosis*

Level of Depression Severity, PHQ-9 Score	Major Depressive Disorder		Other Depressive Disorder		No Depressive Disorder		Total	
	Frequency	%	Frequency	%	Frequency	%	Frequency	%
Minimal: 0-4					2	13.33	2	13.33
Mild: 5-9					2	13.33	2	13.33
Moderate: 10-14	2	13.33	1	6.67	4	26.67	7	46.67
Moderately severe: 15-19	1	6.67					1	6.67
Severe: 20-27	3	20.00					3	20.00
Total	6	40.00	1	6.67	8	53.33	15	100.00

Figure 1. *PHQ-9 Pre-Test Results: Depression Severity*

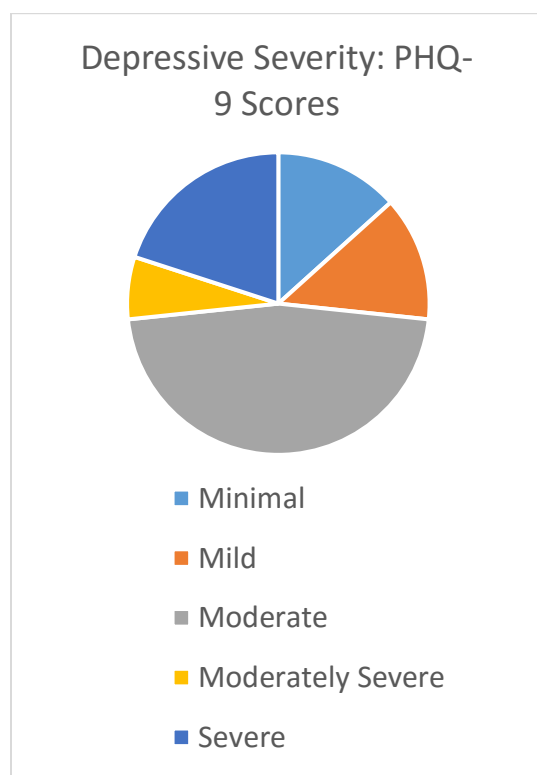
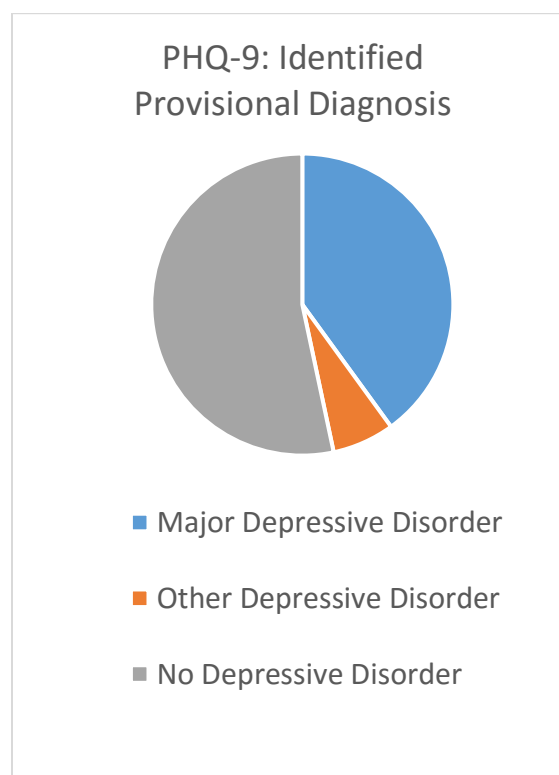


Figure 2. *PHQ-9 Pre-Test Results: IPD*



CSQ-8

Table 12 contains the questions listed, rates, and percentages on the CSQ-8 (See Appendix G for results in detailed written form). The responses are also reported using pie charts in APPENDIX H. The number (N) of responses for each rating (1-4) are provided along with the percent (%) that corresponds to this number. The highest ratings of satisfaction were about recommending the program to a friend (93% responded with Yes, definitely), seeking help again (80% responded with Yes, definitely), and the quality of the service (73% responded with excellent). The lowest ratings on satisfaction were about the service helping the participant deal more effectively with their problems (47% responded Yes, they helped a great deal). It is important to note that one of the participant's responses were not cohesive with written

comments and overall ratings. For example, the participant ranked 6 out of the 8 questions with the highest mark and the other 2 with the lowest. The written comments also suggested he was more satisfied than his ratings indicated; he listed four elements of the program that were helpful to him. These responses may skew the data.

Table 12. *CSQ-8 Quantitative Results: Participant Evaluation Response Codes*

	N	%		N	%
Q.1 How would you rate the quality of service you have received?	15		Q.5 How satisfied are you with the amount of help you have received?	15	
(4) Excellent	11	73%	(4) Very satisfied	9	60%
(3) Good	3	20%	(3) Mostly satisfied	4	27%
(2) Fair	1	7%	(2) Indifferent or mildly satisfied	1	7%
(1) Poor			(1) Quite dissatisfied	1	7%
Q.2 Did you get the kind of service you wanted?	15		Q.6 Have the services you received helped you to deal more effectively with your problems?	15	
(4) Yes, definitely	9	60%	(4) Yes, they helped a great deal	7	47%
(3) Yes, generally	6	40%	(3) Yes, they helped	6	40%
(2) No, not really			(2) No, they really didn't help	2	13%
(1) No, definitely			(1) No, they seem to make things worse		
Q.3 To what extent has our program met your needs?	15		Q.7 In an overall, general sense, how satisfied are you with the service you have received?	15	
(4) Almost all my needs have been met	9	60%	(4) Very satisfied	10	67%
(3) Most of my needs have been met	4	27%	(3) Mostly satisfied	5	33%
(2) Only a few of my needs have been met	2	13%	(2) Indifferent or mildly satisfied		
(1) None of my needs have been met			(1) Quite dissatisfied		
Q.4 If a friend were in need of similar help, would you recommend our program to him or her?	15		Q.8 If you were to seek help again, would you come back to our program?	15	
(4) Yes, definitely	14	93%	(4) Yes, definitely	12	80%
(3) Yes, I think so	1	7%	(3) Yes, I think so	2	13%
(2) No, I don't think so			(2) No, I don't think so		
(1) No, definitely not			(1) No, definitely not	1	7%

APPENDIX I provides a table of the written comments for each participant. Fourteen of the 15 participants provided written feedback. Table 13 and Table 14 expand on these results. Table 13 outlines the themes found in the comments: positive affirmations, personal gains, concerns and a combination of the three. Positive affirmations include comments made by those with an identification (ID) number of 1, 2, 3, 4, 6, 7, 9, 13, and 14. Throughout these comments, gratitude for the program, compliments for the program and therapists, and a unique quality were addressed. Personal gains include comments made by those with an ID of 3, 6, 7, 8, 10, and 12. Throughout these comments, experiences of enjoyment, calmness, relaxation, helpfulness, and personal improvements were addressed. Concerns include comments made by those with an ID of 5, 8, 13, and 14. Throughout these comments, uncertainty about the program and participant criticism toward self were addressed. The most common theme is positive affirmations (9; 60.00%). Table 14 outlines the elements of therapy that were mentioned in the written responses: program, therapist, art/creativity, and a combination of the three. The program was mentioned in comments with an ID of 1, 5, 8, 9, 10, 11, 13, and 14. The therapists was mentioned in comments with an ID of 3, 5, 6, 7, 10, 13, and 14. Art/Creativity was mentioned in comments with an ID of 7, 8, 9, 10, and 13. The most common element mentioned is the program (8; 53.33%).

Table 13. *CSQ-8: Themes from Written Comments*

Themes	Frequency	%
Positive Affirmations	9	60.00
Personal Gains	6	40.00
Concerns	4	26.67
Combination of Themes	7	46.67
Note: Some participant responses included multiple themes, making the total frequency greater than the total number of participants.		

Table 14. *CSQ-8: Elements of Therapy Mentioned in Written Comments*

Elements of Therapy Mentioned	Frequency	%
Program	8	53.33
Therapist	7	46.67
Art/Creativity	5	33.33
Combination of Elements	5	33.33
Note: Some participant responses included multiple elements, making the total frequency greater than the total number of participants.		

Comparative Analysis

APPENDIX J and APPENDIX K highlight components of the data that were compared to further explore the qualitative and quantitative results. APPENDIX J addresses the components of number of sessions, frequency of therapy, diagnosis, PHQ-9 scores, CSQ-8 scores, and CSQ-8 written comments together for each participant. Appendix K provides results using the FREQ procedure to glean more information after comparing two components. The components that were analyzed using this procedure were satisfaction, depressive severity, provisional depression diagnosis, number of sessions, and attendance.

Tracking System

The tracking system produced information that was highlighted in the patient demographic information and in Table 15 and Table 16. The tracking was totaled twice: during the time period between 7.28.16 and 11.6.16 and between 11.7.16 and 3.31.17. A number (n) and percent (%) were provided to indicate total numbers in each row and a percentage based on the total number of referrals.

A total of 72 patients were referred to the program from the beginning of the program in late July until the end of the study in late March. Data was collected regarding patients referred, patients seen, patient denials, groups lead, and current patients twice throughout the 8-month period. Of these 72 referrals, 69 (95.83%) were referred from the neurology department, 40

(55.56%) were seen by this writer and Professor King and 15 (20.83%) denied services either before (9; 12.50%) or after (6; 8.33%) partaking in any art therapy service. Patients declined services for a variety of reasons: a) makes things worse, b) uncertain of therapeutic needs, c) too far of a drive, d) work conflicts, e) found alternative therapist, and f) no reason was given.

As of March 31, 2017, 28 (38.89%) of the referrals were being seen by either this writer or Professor King. Of these 28 patients, the majority were seen individually (22, 78.57%). The first art therapy group started late in March and represented a small portion of the patient referrals. Thirty-two patients (44.44%) were not able to be seen by the art therapy team for a variety of reasons: a) transportation issues, b) not a good time, c) too far of a drive, d) other obligations during hours, e) patient not responding to voicemails or calls, and f) still attempting to contact. All of these reasons were not considered declined because the patient verbalized hoping to try art therapy in the future if circumstances change. Currently this writer sees 22 (78.57%) of the patients for individual and group therapy and Professor King sees 6 (21.43%) of the patients for individual therapy.

Patient attendance were also recorded using the tracking system. From the beginning of September when the first patient was seen to the end of the study in late March, patients attended one hundred and forty-seven total art therapy sessions with 48 cancellations or no shows. The show rate during this time was 75.38%.

Table 15. *Tracking of Patient Referrals*

	7.28.16-11.6.16		11.7.16-3.31.17		7.28.16-3.31.17	
	n	%	n	%	n	%
# of patients referred	36	100.00	36	100.00	72	100.00
# of patients referred from neurology	35	97.22	34	94.44	69	95.83
# of patients referred from psychiatry	1	2.78	2	5.56	3	4.17
# of new patients seen	18	50.00	22	61.11	40	55.56
# total denied	5	13.89	10	27.78	15	20.83
# denied after intake	1	2.78	5	13.89	6	8.33
# denied before intake	4	11.11	5	13.89	9	12.50
# unable to see					32	44.44
# of groups lead	0	0.00	1		1	
# of patients in group			6	16.67	6	8.33
# of current patients (as of 3.31.17)					28	38.89
# of patients who participated in study					15	20.83

Table 16. *Patient Involvement and Case Load: Tracked on 3.31.17*

	3.31.17	
	n	%
# of current patients	28	100.00
# of patients seen only individually	22	78.57
# of patients seen only in group	4	14.29
# of patients seen in group and individually	2	7.14
# of patients who participated in study	15	53.57
Case load for this writer	22	78.57
Case load for Professor King	6	21.43

CHAPTER 5

DISCUSSION

Program evaluation is often used to collect data to gain information about a program in order to improve services. A comprehensive literature review informed the use of evaluation tools to assess a new ATNM program within an academic medical center and provides a clear understanding of the benefits of evaluating programs. It was hypothesized that evaluating a program through the use of a satisfaction questionnaire and a pre-post questionnaire would demonstrate the value and impact of the ATNM program. The following discussion outlines major findings from the satisfaction questionnaire, CSQ-8, and the pre-test findings from the PHQ-9. Data regarding demographic information was also found to be important in analyzing the value of the program. Clinical applications and limitations of the study will also be discussed.

Major Findings

The idea for the program emerged because there is a lack of psychotherapy services to provide social and emotional support to the patients at the IUNC. This was noted by the physicians through mutual conversations and became more clear through 1) the number of referrals and 2) patients' comments on CSQ-8. In the first three months, there were 36 patients referred and 18 patients seen by the ATNM staff. In the second three months, patient referrals remained consistent (36) making a total of 72 referrals from the start of the program. At the end of the study, 22 patients were being seen by the ATNM staff. Feldman et al. (2014) consider the relevance patient attendance and demographics has on the evaluation of a program. They note understanding how the service is used informs the development of the program and highlights what changes can be made to reach a maximum value.

Overall, patients responded to the program positively as evidenced by their verbalizations and results from the CSQ-8. Verbalizations, although not a required part of the study, emerged as an additional form of qualitative data that was impactful in highlighting the value of the program. The content was often similar to the written comments on the CSQ-8. Kowitt et al. (1999) and Feen-Calligan and Nevedal (2008) support the use of both verbal and written responses to explore the value of the program. The results from the qualitative data as well as the quantitative data from the CSQ-8 are an indication of the programs value because the patients consistently praise it as beneficial.

The current program operations for ATNM at IUNC include: 1) limited staff, 2) unlimited sessions available per patient, and 3) continuous referrals. Over time, this may cause a shift in satisfaction scores because the availability of the therapists may become limited, leaving some patients on a waiting list to be seen and unable to address their social and emotional needs in a timely manner. Ways to anticipate meeting this potential challenge are to 1) hire additional staff; 2) explore limiting sessions to a recommended dosage or protocol; and 3) increase therapist and physician communication about the ATNM program.

Consistent communication between IUNC physicians and the ATNM staff and an active referral flow are key elements to the success of the program. Currently, a high percentage (95.83%) of referrals come from the neurology department with only the small remaining percent coming from the psychiatry department. While this difference was not anticipated, it brings to light the importance of an active referral flow and consistent communication. Without the referrals from the neurology department, the number of patients served by the ATNM program would be significantly less. Consistent communication helps increase the referrals and gives the physicians an understanding of the art therapy service that is benefiting their patient's health.

Accessing the electronic medical record system for art therapy notes may aid in increasing the communication between physician and therapist. For the future, it is suggested to explore addressing patient care with physicians through a scheduled routine case conference. As an extension of the evaluation process, it may be beneficial to also evaluate physicians' experience and satisfaction with the referral process and the ATNM program.

Regarding data collection, it will be important for future evaluation to integrate the data collection into the intake process because 1) the amount of time to collect data took time from clinical treatment and 2) the PHQ-9 and DCF contain valuable information that were found to be significant to understanding the patient's social and emotional needs. Therefore, the integration of the data collection into the intake process is valuable, not only in mitigating the interference on therapy, but also in obtaining information that will inform treatment.

Multiple participants did not align their diagnosis and chief complaint with their therapist's information or left their answer blank. Patient diagnoses and chief complaints were an important element to understanding who was being treated within the ATNM program and how they engaged in treatment. In the researcher's opinion, it is important for the patients to have a full understanding of their diagnoses and chief complaint, but not all of their responses aligned with the recorded information from the EMRS and therapist's notes. This was unexpected because patient diagnoses are often discussed throughout treatment. It was also common for participants to not report a diagnosis or a chief complaint on the DCF. This writer wonders why the patients left the form incomplete and what the potential reasons for this might be. It is possible that the patients do not have a clear understanding of their reason for referral, or perhaps their diagnosis. Another possibility is that the patients might be resistant to sharing their chief

complaint. This is an interesting area of inquiry to follow up with future study, as it potentially impacts patient care and the therapeutic relationship.

Addressing each participant's purpose for being in treatment and the diagnoses related to their care is valuable to improving the therapeutic alliance. Joyce, Piper, and Ogrodniczuk (2007), Hilsenroth, Peters, and Ackerman (2004), and McWilliams (2004) discuss the alliance between patient and therapist as being a significant component to the success of treatment. Maintaining an alliance between the therapist and patient aids in improving patient care. Forming this alliance, often gives the patient a sense of purpose and value.

This writer wonders if there is a connection between lack of recognition of diagnosis and identity confusion. With each participant addressing their identity, often they say "I do not know who I am." Patients recognize that with all their changes and challenges in life that it is hard to feel grounded and sure of what their purpose is in life. This writer believes that aiding in the completion of the DCF may increase the participants understanding of who they are and may possibly support their desire to own their struggles and diagnoses. In the case that the DCF was completed by the therapists and patient together during the intake, the patient and therapist would begin an alliance at the intake process. It is suggested that acknowledging diagnoses in the intake process will assist in the patient's understanding of their identity. Making this a goal for treatment would likely allow for improved patient care and mental health treatment.

Overall, the results found using the DCF became highly significant to understanding how patients engage in therapy and reflects their personal experience. Found throughout literature, it is noted that the results from an evaluation study can be used to understand where improvements can be made in order to reach the highest level of success for the program and the individuals who seek the service (Feen-Calligan & Nevedal, 2008; Feldman et al., 2014; Saunders &

Saunders, 2000; Klorer & Robb, 2012). Based on the results from the DCF, it was found that improvements can be made in aligning patient awareness of treatment in relation to diagnoses and chief complaints.

The mean score for PHQ-9 was low considering the number of patients who were recorded in the EMRS as having depression (60%). All of the participants completed the PHQ-9 after their intake session, meaning they had attended multiple art therapy sessions prior to addressing their depressive symptomatology, some as many as 16 sessions. Therefore their PHQ-9 score may be lower due to their attendance in art therapy.

Wand et al. (2011) recognized there is not a gold standard for choosing a program evaluation method; however, practitioners are more successful in their pursuit to improve and adapt their programs if a qualitative and quantitative, or mixed methods, design is used. Often the quantitative results from the PHQ-9 and CSQ-8 were enhanced by the knowledge gained from the qualitative results and the DCF. The combined results from these three evaluation tools demonstrated the success of the mixed methods design (refer to APPENDIX J and APPENDIX K). Using a mixed method approach aided in broadening the results, gaining a fuller understanding of each participant's experience, and understand how engaging in therapy can affect satisfaction and depressive symptomatology.

The results found in APPENDIX J deemed to be beneficial to understanding the impact and value of the program. The participant with the highest PHQ-9 score (27) rated the effects from the PHQ-9 as being extremely difficult to manage. Although his score may demonstrate that his depressive severity has not improved during his seven sessions, his CSQ-8 scores and written comments reflect satisfaction and benefit from the program. He noted, "This program has saved me many times from suicide. I've never had anything like this before." This comment not

only reflects a benefit from therapy but also more fully identifies the severity of his depressive symptomatology. It also highlights the need for therapy and how important it is for the IUNC to have psychotherapy incorporated into their system. This writer's concern is that if the patient were not given the opportunity to engage in the ATNM program, then his suicidal ideation may have become more severe. In comparison, another patient with a high PHQ-9 score (22) only commented by writing, "I look forward to coming!" While this person's severity is significant, the comment does not glean any additional information about the depression severity. In these instances, Johnson et al.'s (2007) second and fifth purpose for a mixed methods design was seen: complementarity, meaning comparing results from one method enhanced the results from another method and expansion, meaning the breadth of information was expanded on by using multiple methods.

Also, the participant with a PHQ-9 score of 27 is the only participant that attends therapy monthly. This writer wonders if the severity of his depressive symptomatology and the diagnosis of Myasthenia Gravis make it challenging for him to leave his home or if he may be resisting therapy. Information such as this would be beneficial in treatment to address in order to gain a fuller understanding of the participants experience and increasing patient attendance to a weekly basis would possibly improve the patient's depressive symptomatology.

The PHQ-9 scores do not always align with reported diagnosis and written comments. On participant's PHQ-9 score (0) indicated no depressive severity but in her comments she mentions having "home stress" and "a lot of bad" in her past which she noted as affecting her present functioning. Without her written comment, it would not have been apparent that this participant was needing to cope with depressive symptomatology. Although she was able to identify her satisfaction with art therapy in regards to her stress, she was not able to identify her depressive

symptomatology from a more objective framework. In addition, another participant noted a diagnosis of depression but her PHQ-9 IPD was NDD. Based on these two participants, this writer wonders if answering the PHQ-9 is challenging, especially for those who are currently fighting their symptoms. This writer is curious about their unconscious resistance to identify with their symptoms and conscious willingness to confront them. This is important because addressing these unconscious and conscious behaviors about patient health will aid in the development of treatment goals and potentially increase patient care.

Further, regarding the CSQ-8, the qualitative information, along with the quantitative data, was helpful to suggest improvements to the growing program. For example, the lowest CSQ-8 score also had a comment that stated “I have only just started the program. I need more time to really answer these questions better.” In this case, it may be important to reconsider when the CSQ-8 is administered in order to gather greater informed results. Another low CSQ-8 score was paired with a comment that stated “My ‘negative’ responses are not due to the program or my art therapist, but due to the way my brain works”. In this case, this score lowers the average CSQ-8 score but informs the researcher about the meaning of the results. Without the qualitative component, the results would not have been fully understood in regard to understanding the value of the program. Wand et al. (2011) also recognized the significance of using qualitative results to enhance quantitative outcomes. In these instances, Johnson et al.’s (2007) first purpose for a mixed methods design was seen: triangulation, meaning results were validated using multiple methods of inquiry.

Comparing results using the FREQ Procedure (APPENDIX K) were also found to be beneficial in exploring the results through a mixed method approach. Comparing satisfaction with IPD showed results that indicated there was more satisfaction among those with an IPD of

MDD or ODD. This writer is curious about the correlation between satisfaction and need. It may be that those with a greater need for therapy are often more satisfied. These participants may find that having the chance to be in therapy is satisfying in itself and therefore they are thankful the service is an option for them. In addition, they may find that having a personal connection with a therapist is what drives their satisfaction. For many in the program, isolation due to their diagnosis is common, although only 20% of participants currently address isolation as a chief complaint.

Another comparison that should be addressed regards severity scores and frequency of therapy. According to the data in APPENDIX K, it is more common for participants to seek treatment less often when their severity score is lower. It may be assumed that those who do not have a severe depression score may not find it necessary to attend therapy every week because their symptoms are being managed well. The same can be said for severity score and number of sessions; those with a lower severity score have attended less sessions. The patient may be unconsciously considering the treatment of their mental health as less severe and therefore consciously attend therapy less frequently. This writer is curious about the incongruences found between this data and the tendencies for people with depression to have difficulty attending to activities of daily living (Beck & Alford, 2009). This may be a reflection of the program's impact on these patients and how they perceive attending the ATNM program as beneficial to them.

According to the results from the tracking system, the show rate for people in the ATNM program is 75.38%. Compared to the IUNC show rate for the general population, this number is approximately 25% higher. This higher number indicates possible satisfaction and value in the program. Being in therapy may be correlated with satisfaction of therapy.

The number of patients who terminated from art therapy against medical advice was six. From these six patients, five of them attended therapy for more than one session. With each patient, they chose to terminate after attending a session without discussing in depth their purpose for termination. However, one person noted he felt therapy was making him feel worse. This writer wishes each of these participants could address their desire to terminate in order to gain more information about reasons for termination.

Although the therapist was mentioned in the written comments by seven participants (46.67%), it became clear before the results were gathered that the therapeutic relationship influenced the healing component. This writer found that many of the patients seen in the ATNM program came to therapy with complicating histories, emotional conflicts, and confused identity. The one thing they were seeking was a listening ear and someone to validate their life experiences. It is important for each individual to feel safe in each session and to have a desire to come to therapy. This writer wonders what level of success is dependent upon the therapeutic relationship and the therapist's ability to confront the patient's symptoms and diagnoses. The approach to therapy in maintaining the alliance, while also challenging the patient's behaviors, may further aid in improving patient health.

The five basic purposes of evaluation from Feder and Feder (1998), the results can be used to accomplish all five. The satisfaction questionnaire helped determine the needs of the participants based on their comments and overall scores. The PHQ-9 aimed to predict future behavior and monitor change, upon completion of the post-test. However, the pre-test can also be used as a baseline to understand where the person is in treatment and acknowledge if the person is ready terminate. Lastly, the results can be used to improve the program. It is this writer's goal to take the information that was gained from the study to improve patient care. From this study,

the results and process informed how to increase patient/therapist alignments and how to address identity confusion through the evaluation process. Also, it became more clear that most of the participants were least satisfied with the question: “Have the services you received helped you to deal more effectively with your problems?”. With this information, it can become more necessary in treatment to provide skills that can be used to effectively solve problems.

Clinical Applications

This study provides a multitude of clinical applications. The application of this research has the potential to affect other art therapy programs that are seeking to evaluate value and impact of services. It may encourage art therapists to evaluate art therapy programs and increase an understanding of art therapy intervention through the collection and analysis of outcome measures. Increasing art therapy programs at centers similar to IUNC, potentially plays a role in the improving the mental health treatment of those with neurological and psychiatric disorders. This study also contributes to student learning and art therapy research.

Limitations and Delimitations

There are limitations in the sample size of the participants being too small compared to the larger sample size capacity (Mertens, 2010). The number of participants referred to the ATNM program (N=71) were significantly higher than the total number of participants in the study (N=15). Ultimately, only 21% of the potential sample size agreed to be in the study.

Another limitation to the study was the choice to administer the PHQ-9 pre-test to patients who had already taken part in art therapy services. The results, therefore, may be skewed towards lower PHQ-9 scores because they were already benefiting from participation.

The patients who discontinue services pose a limitation to the study because they were not able to add their experience to the study. Patients who chose to withdraw from art therapy may be less satisfied and would possibly provide more feedback about making improvements.

The choice to recruit participants from the ATNM program within a larger academic medical center was an important delimitation. Recruiting only these participants helped to narrow the results to only those who were receiving art therapy services. In this case, the results were directly related to the program in order to gain insight about the value and impact of services.

The choice to include the specific themes and elements mentioned regarding the CSQ-8 written comments is also a delimitation. Choosing only those specific elements and themes aided in understanding the value and impact of the program. For example, the three elements: program, therapist, and art/creativity are all significant elements to the treatment of each patient. The elements each participant chose informs how they perceive therapy and what they value most.

CHAPTER 6

CONCLUSIONS AND RECOMMENDATIONS

The purpose of this study is to use evaluation tools to demonstrate the impact and value of a new art therapy program. It was hypothesized that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program. A literature review aided in gaining a better understanding of previous research conducted on program evaluation. The review also informed the design of the mixed methods study which helped guide adjustments that will be made to improve the ATNM program.

According to the EMRS, the top two diagnoses among participants are depression and anxiety with 60 percent of the participants having depression and 40 percent having anxiety, which did not align with patient responses on the DCF. The mean score for the satisfaction questionnaire was 28.67 with a range from 23 to 32 and the PHQ-9 depression scores indicated median severity and it was more common for people to not have a provisional diagnosis of depression. The preliminary data indicated an overall significant level of depression and anxiety among the referrals of patients having chronic neurological conditions. A high level of patient satisfaction and substantial benefit from art therapy intervention was noted in the results from the CSQ-8. Overall, the findings of this study suggest that participating in the ATNM program may be a useful way to work through the psychological and emotional needs of patients referred. In addition, the art therapy intervention afforded by the ATNM program may decrease depressive symptoms among people who have neurological disorders.

Recommendations.

Further research. Follow up on the four hypotheses noted in the Introduction:

1. It is hypothesized that evaluating a program through the use of a satisfaction survey and a pre-post questionnaire will demonstrate the value and impact of the ATNM program.
2. It is hypothesized that the implementation of an ATNM program will improve the clinical outcomes of patients and caregivers served in an academic neuroscience center.
3. It is hypothesized that implementation of an ATNM program at an Academic Medical Center is a cost-effective complement to the clinical care of complex patients.
4. It is hypothesized that physician buy-in and the establishment of a user-friendly referral and reporting system are essential factors that influence the successful creation of an art therapy program.

Adjustments to the evaluation process and tools. For future administration of the PHQ-9, CSQ-8 and DCF, recommendations may be considered and used to improve the evaluation process to obtain fruitful results. In order to align patient perspectives of health and treatment with the therapists, it is recommended to administer the PHQ-9 and DCF with the patient as an intake procedure. It appears more important to treatment for the patient to complete the study knowing the therapist will be aware of their results. Completing the PHQ-9 during the intake session will be needed to gain a baseline score that represents their depressive severity before treatment begins and to begin the therapeutic alliance. The DCF and PHQ-9 will be used to inform treatment and readdress why they are coming to therapy and the diagnoses that are pertinent to therapy. A more rigorous intake process helps frame treatment and incorporate the study process into treatment. Otherwise it is recommended to extend the time allotted to

complete the study to a 90-minute session. The goal for making these adjustments is to make the process more aligned with the treatment process.

Multiple considerations for change are recommended for the CSQ-8. It is recommended to administer the CSQ-8 for those patients who have attended therapy for more than five sessions. Satisfaction scores will likely be more accurate when the participant has had enough time to engage in the program. It is recommended to adjust the CSQ-8 to include more qualitative data about scores below a “3”. Also questions about the art materials, referral process, therapeutic alliance and therapy room may be added to provide further understanding of program satisfaction and are more specific to the art therapy program. A custom designed client satisfaction survey should be considered in order to incorporate these topics. Lastly, it is recommended to develop an evaluation system for assessing those patients who deny services after partaking in therapy. It may be valuable to create an online tool that can be accessed outside of the IUNC.

It is recommended to continue using the tracking system in order to further obtain information about physician referrals, the therapeutic alliance, and patient attendance.

Program Operations. Many operational components were perceived as an aid in the development of a valued and impactful program. In order to maintain the success of the program, recommendations are made based on the current program operations. As a student at the center interning 24 hours a week, this writer recommends carrying a case load that allows for five to six art therapy individual sessions each day. An increase in group sessions is also recommended to further develop the program and provide a wide range of therapy interventions for the patients. It is also anticipated for the number of referrals to exceed the availability of the staff. The continuation of referrals, limited number of staff members, and longevity of treatment makes it

challenging for any new referrals to be seen. Therefore, as a long-term goal for the program, additional staff is recommended to aid in the growth of the program. The longevity of treatment may need to be explored in the future in order to support as many patients as possible.

Interventions commonly used with the patients in the ATNM program are listed below and recommended to be used by any therapist working with those who have neurological disorders. These interventions may have been a contribution to the patient's satisfaction and benefit from the program. It is important to note that with any patient it is important to meet them where they are at and support their effort to engage.

1. Symbolic Interventions: Used as a non-threatening, symbolic way to explore identity (i.e., draw a tree, magazine collage of likes and dislikes, draw a safe space, create a monster, bridge drawing)
2. Exploration of emotions through paint or magazine images
3. Create an image of here-and-now emotions: Used to keep a record of strong emotions and reflect on over time
4. Skill building: To improve patient's self-esteem and provide a sense of mastery
5. Create a pie chart indicating where you spend your time: Used to reflect on current stressors, values, and time management
6. Create an art piece together (patient and therapist): Used to reflect on control and lack of control
7. Decorate the inside and outside of a box: Used to address internal and external identity, thoughts, and emotional expression

Further exploration about therapist and physician communication should be considered.

Possible ways to increase the communication include: 1) accessing the EMRS for the recording

of art therapy notes, 2) scheduling routine case conferences, 3) evaluating the physicians' experience and satisfaction with the referral process and the ATNM program, and 4) continue presenting to the IUNC staff about the ATNM program.

Lastly, it is also recommended that the results be presented to the hospital center's staff for consideration of continuing program development and acquiring funding. The long term vision for the program is to house a creative arts therapy program within the IUNC system. In order to maintain and sustain such a program, funding must be provided for full-time staff and student interns.

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APPENDIX A

PHQ-9

PATIENT HEALTH QUESTIONNAIRE-9 (PHQ-9)				
Over the <u>last 2 weeks</u> , how often have you been bothered by any of the following problems? (Use "✓" to indicate your answer)	Not at all	Several days	More than half the days	Nearly every day
1. Little interest or pleasure in doing things	0	1	2	3
2. Feeling down, depressed, or hopeless	0	1	2	3
3. Trouble falling or staying asleep, or sleeping too much	0	1	2	3
4. Feeling tired or having little energy	0	1	2	3
5. Poor appetite or overeating	0	1	2	3
6. Feeling bad about yourself — or that you are a failure or have let yourself or your family down	0	1	2	3
7. Trouble concentrating on things, such as reading the newspaper or watching television	0	1	2	3
8. Moving or speaking so slowly that other people could have noticed? Or the opposite — being so fidgety or restless that you have been moving around a lot more than usual	0	1	2	3
9. Thoughts that you would be better off dead or of hurting yourself in some way	0	1	2	3

FOR OFFICE CODING 0 + _____ + _____ + _____
=Total Score: _____

If you checked off any problems, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

Not difficult at all	Somewhat difficult	Very difficult	Extremely difficult
<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

APPENDIX B

CSQ-8

Please help us improve our program by answering some questions about the services you have received. We are interested in your honest opinions, whether they are positive or negative. *Please answer all of the questions.* We also welcome your comments and suggestions. Thank you very much; we really appreciate your help.

Circle your answer:

1. How would you rate the quality of service you have received?

4	3	2	1
Excellent	Good	Fair	Poor

2. Did you get the kind of service you wanted?

1	2	3	4
No, definitely	No, not really	Yes, generally	Yes, definitely

3. To what extent has our program met your needs?

4	3	2	1
Almost all of my needs have been met	Most of my needs have been met	Only a few of my needs have been met	None of my needs have been met

4. If a friend were in need of similar help, would you recommend our program to him or her?

1	2	3	4
No, definitely not	No, I don't think	Yes, I think so	Yes, definitely so

5. How satisfied are you with the amount of help you have received?

1	2	3	4
Quite dissatisfied	Indifferent or mildly dissatisfied	Mostly satisfied	Very satisfied

6. Have the services you received helped you to deal more effectively with your problems?

4	3	2	1
Yes, they helped a great deal	Yes, they helped	No, they really didn't help	No, they seemed to make things worse

7. In an overall, general sense, how satisfied are you with the service you have received?

4	3	2	1
Very satisfied	Mostly satisfied	Indifferent or dissatisfied mildly	Quite dissatisfied

8. If you were to seek help again, would you come back to our program?

1	2	3	4
No, definitely not	No, I don't think	Yes, I think so	Yes, definitely so

Thank you for participating in the art therapy study! We would appreciate hearing from you, so please let us know about your experience.

Comments (optional):

APPENDIX C

DATA COLLECTION FORM FOR**Art Therapy Program: Data Collection****Indiana University Neuroscience Center**

You are invited to participate in a research study that aims to collect patient information regarding the new art therapy program in neuroscience and medicine. You were selected as a possible subject because you are currently receiving services from the art therapy clinic. Please read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Maria Riddle and Juliet King through the Department of Neurology. As part of this study, you need to complete this form.

Please fill out the following information during intake of the study:

Date of intake: _____

Gender: _____

Age: _____

Race: _____

Diagnoses related to your art therapy treatment: _____

Date of diagnosis: _____

Chief Complaint/Reason for Therapy: _____

Number of sessions attended before intake: _____

Frequency of art therapy (circle one): Once a week / Every other week / Other: _____

Are you currently receiving therapy services outside of this art therapy program (circle one)?

YES / NO

Are you currently on medication (circle one)? YES / NO

Once you have filled out the above information, please place it back into your assigned envelope.

You will complete the below information when the study is ending.

Please fill out the following information at the end of the study:

Date of the end of the study (date you are completing this form): _____

Number of sessions attended during the study: _____

Are you currently receiving therapy services outside of this art therapy program (circle one)?

YES / NO If different from the answer above, please explain.

Are you currently on medication (circle one)? YES / NO If different from the answer above, please explain.

Once you have completed the form, please place it back into your assigned envelope. Thank you for participating in this study.

APPENDIX D

Sample Verbal Script

I would like to ask you if you would be interested in participating in an art therapy research study that Juliet King and Maria Riddle are conducting at the IU Neuroscience Center. As part of the Art Therapy in Neuroscience and Medicine program and the art therapy intern's education, we are conducting research about the program in order to evaluate the value and impact of the program. If you choose to participate, you will complete three forms at varying times. These forms will be asking for information that may be sensitive and have the potential to cause increased distress. While there are no direct benefits from the study, you may receive potential benefits from art therapy. The time we spend together will not change, however, you will need to allot approximately 30 additional minutes throughout the study in order to complete the forms. If you do not have time outside of our sessions, we can designate time during our 60 minute session to complete the study. At any time during the study, you may choose to withdraw from the study, which will not require you to terminate art therapy treatment. If you would like to participate, we will go over the requirements, risks, and benefits in more detail. If you are interested, we can begin the study today or during our next appointment.

APPENDIX E

INDIANA UNIVERSITY INFORMED CONSENT STATEMENT FOR**Art Therapy Program: Data Collection
Indiana University Neuroscience Center**

You are invited to participate in a research study that aims to collect patient information regarding the new art therapy program in neuroscience and medicine. You were selected as a possible subject because you are currently receiving services from the art therapy clinic. Please read this form and ask any questions you may have before agreeing to be in the study.

The study is being conducted by Maria Riddle and Juliet King through the Department of Neurology.

STUDY PURPOSE

The purpose of this study is to collect data from patients who are receiving art therapy services at the Neuroscience Center. The data collected will be used to demonstrate the value of the art therapy program.

NUMBER OF PEOPLE TAKING PART IN THE STUDY

If you agree to participate, you will be one of approximately 15 subjects who will be participating in this research.

PROCEDURES FOR THE STUDY

If you agree to be in the study, you will do the following things:

Complete the Data Collection form. You will spend approximately 5-10 minutes to complete this form: 1) during intake of the study and 2) at the end of the study. The information that you will need to share includes: diagnosis, date of diagnosis, gender, date of intake of study, date of end of study, chief complaint, number of sessions attended before intake, number of sessions attended during the study, current therapy services receiving, and brief medication information.

Complete one questionnaire two times: 1) during intake of the study and 2) at the end of the study. You will spend approximately 15 minutes total each time to complete the questionnaire listed below:

- 1) Patient Health Questionnaire-9: measures severity of depression

Complete an additional questionnaire two times: 1) during the middle of the study and 2) at the end of the study. You will spend approximately 10 minutes each time to complete the questionnaire listed below:

- 2) Client Satisfaction Questionnaire-8: measures subject's satisfaction regarding their perspective on the value of the service

Completion of the two questionnaires and data collection form listed above will take place at the IU Neuroscience Center. In order to complete these tasks, you will schedule two visits, which will coincide with your individual art therapy sessions: 1) during intake of the study and 2) at the end of the study. You will complete them after an art therapy session, allotting approximately 20 minutes after the session to complete the appropriate documents. After the art therapy session you will be guided to a private room to complete the documents. The documents will be in an envelope with a number written on it. Upon finishing the appropriate documents, you will place them into a confidential box that will not be reviewed

by the researchers until the end of the study. In this box will be a sheet of paper that has a table with a “numbers” column and an “initials” column. It is each participant’s job to record their initial next to the number that was given to them on the envelope that holds all of the forms to be completed throughout the study. It is important to assign you to a number in order to keep your questionnaires together. The confidential box will be stored in a locked cabinet. The duration of the study is approximately 3 months long, from mid-January to mid-April.

RISKS OF TAKING PART IN THE STUDY

While on the study, the risks are:

1. Potential loss of confidentiality
2. Potential distress caused by questions on the PHQ-9
3. Potential influence on the therapy: The patient may feel different about participating in art therapy after completing forms about themselves and regarding the service.

Measures that will be employed to minimize the risks and side effects listed above:

1. Conversation during the beginning of the study that will ensure confidentiality: The patient and researcher/therapist will discuss together the importance of maintaining confidentiality
2. Reminder at each phase of completing the questionnaires that participation is voluntary and withdrawing from the study is allowed at anytime
3. Patients receiving one-on-one art therapy will be asked to participate and consent to the research during an individual private session
4. Data will be collected following an art therapy session in a private room where the patient can complete and leave the forms in a confidential box

BENEFITS OF TAKING PART IN THE STUDY

There are no direct benefits that can be guaranteed. However, we hope by participating in the study, the participants will also receive the possible benefits of art therapy which include decreasing depressive symptomatology. The participants may also see that their feedback influenced the program.

CONFIDENTIALITY

Efforts will be made to keep your personal information confidential. We cannot guarantee absolute confidentiality. Your personal information may be disclosed if required by law. Your identity will be held in confidence in reports in which the study may be published.

Organizations that may inspect and/or copy your research records for quality assurance and data analysis include groups such as the study investigator and his/her research associates, the Indiana University Institutional Review Board or its designees and (as allowed by law) state or federal agencies, specifically the Office for Human Research Protections (OHRP) who may need to access your medical and/or research records.

COSTS

You will not have added costs for taking part in this study.

PAYMENT

You will not receive payment for taking part in this study.

CONTACTS FOR QUESTIONS OR PROBLEMS

For questions about the study or a research-related injury, contact the researcher, Juliet King at 317-278-5466. If you cannot reach the researcher during regular business hours (i.e., 8 a.m. to 5 p.m.), please call the IU Human Subjects Office at 317-278-3458.

For questions about your rights as a research participant, to discuss problems, complaints, or concerns about a research study, or to obtain information or offer input, contact the IU Human Subjects Office at 317-278-3458 or by e-mail at irb@iu.edu.

VOLUNTARY NATURE OF THIS STUDY

Taking part in this study is voluntary. You may choose not to take part or may leave the study at any time. Leaving the study will not result in any penalty or loss of benefits to which you are entitled. Your decision whether or not to participate in this study will not affect your current or future relations Indiana University Health or the art therapy clinic.

SUBJECT'S CONSENT

In consideration of all of the above, I give my consent to participate in this research study.

I will be given a copy of this informed consent document to keep for my records. I agree to take part in this study.

Subject's Printed Name:_____

Subject's Signature:_____ **Date:**_____

(must be dated by the
subject)

Printed Name of Person Obtaining Consent:_____

Signature of Person Obtaining Consent:_____ **Date:**_____

APPENDIX F

INDIANA UNIVERSITY
AUTHORIZATION FOR THE RELEASE OF HEALTH INFORMATION FOR RESEARCH
HEALTHY SUBJECT RESEARCH PARTICIPANTS

Introduction: You have the right to decide who may review or use your Protected Health Information ("PHI"). The type of information that may be used is described below. When you consider taking part in a research study, you must give permission for your PHI to be used and disclosed by the research team for the specific purpose of this research study.

What does this authorization relate to? This authorization relates to the following study:

Art Therapy Program: Data Collection

<i>TITLE OF THE RESEARCH</i>	<i>IRB PROTOCOL #11612500180</i>
Juliet King	
<i>PRINCIPAL INVESTIGATOR (in charge of Research Team)</i>	<i>SPONSOR #</i>
<i>NAME OF RESEARCH PARTICIPANT</i>	<i>BIRTHDATE</i>
<i>STREET ADDRESS</i>	<i>CITY, STATE & ZIP CODE</i>

What information will be used for research purposes? The PHI used for this research study will include information that you provide to the research team and any data and reports created by the research team that may include this information. Your medical records will not be requested or otherwise accessed.

Who can access your PHI for the study? The Principal Investigator and members of his/her research team may share my PHI (or the PHI of the individual(s) whom I have the authority to represent), with the following persons or groups for the research study:

- The members and staff of the Human Subjects Office
- The members of the Institutional Review Boards (IRB) that approve this study
- Indiana University and/or Indiana University affiliated institutions with compliance and financial oversight, including but not limited to:
 - Office of Research Compliance
 - Office of Research Administration
 - HIPAA Privacy and Security Compliance Office
 - General Counsel's Office
 - Internal Audit
- U.S. or foreign governments or agencies as required by law
- Federal agencies with research oversight responsibilities including but not limited to:
 - The United States Department of Health & Human Services (HHS)
 - Office for Human Research Protections (OHRP)
 - Office for Civil Rights (OCR)
 - National Institutes of Health (NIH) [for NIH sponsored research]

- The United States Food and Drug Administration (FDA) *[for FDA regulated research]*
- The following research sponsor(s): ***Department of Neurology and Clinical and Translational Science Institute***

Expiration date of the authorization: This authorization is valid until the following date or event

☐ Date: 5/14/2017

Efforts will be made to ensure that your PHI will not be shared with other people outside of the research study. However, your PHI may be disclosed to others as required by law and/or to individuals or organizations that oversee the conduct of research studies, and these individuals or organizations may not be held to the same legal privacy standards as are doctors and hospitals. Thus, the research team cannot guarantee absolute confidentiality and privacy.

I have the right:

1. To refuse to sign this form. Not signing the form will not affect my regular health care, including treatment, payment, or enrollment in a health plan or eligibility for health care benefits. However, not signing the form will prevent me from participating in the research study above.
2. To review and obtain a copy of my personal health information collected during the study. However, it may be important to the success and integrity of the study that persons who participate in the study not be given access until the study is complete. The Principal Investigator has discretion to refuse to grant access to this information if it will affect the integrity of the study data during the course of the study. Therefore, my request for information may be delayed until the study is complete.
3. To cancel this release of information/authorization at any time. If I choose to cancel this release of information/authorization, I must notify the Principal Investigator for this study **in writing** at: IU Health Neuroscience Center 355 W 16th St, Indianapolis, IN, 46202. However, even if I cancel this release of information/authorization, the research team, research sponsor(s), and/or the research organizations may still use information about me that was collected as part of the research project between the date I signed the current form and the date I cancel the authorization. This is to protect the quality of the research results. I understand that canceling this authorization may end my participation in this study.
4. To receive a copy of this form.

I have had the opportunity to review and ask questions regarding this release of information/authorization form. By signing this release of information/authorization, I am confirming that it reflects my wishes.

Printed name of Individual/Legal Representative

Signature of Individual/Legal Representative

Date

**If signed by a legal representative; state the relationship and identify below the authority to act on the individual's behalf.*

***Individual is:** ☐ a Minor ☐ Incompetent ☐ Disabled ☐
Deceased

***Legal Authority:**
☐ Custodial Parent ☐ Legal Guardian ☐ Executor of Estate of the Deceased

☐ Power of Attorney Healthcare ☐ Authorized Legal Representative ☐ Other:

APPENDIX G

CSQ-8 Quantitative Results: Written Form

Q.1 How would you rate the quality of service you have received? Of the 15 responses, 11 (73%) responded with “excellent”, 3 (20%) responded with “good” and 1 (7%) responded with “fair”.

Q.2 Did you get the kind of service you wanted? Of the 15 responses, 9 (60%) responded with “yes, definitely” and 6 (40%) responded with “yes, generally”.

Q.3 To what extent has our program met your needs? Of the 15 responses, 9 (60%) responded with “almost all my needs have been met”, 4 (27%) responded with “most of my needs have been met”, and 2 (13%) responded with “only a few of my needs have been met”.

Q.4 If a friend were in need of similar help, would you recommend our program to him or her? Of the 15 responses, 14 (93%) responded with “yes, definitely” and 1 (7%) responded with “yes, I think so”.

Q.5 How satisfied are you with the amount of help you have received? Of the 15 responses, 9 (60%) responded with “very satisfied”, 4 (27%) responded with “mostly satisfied”, 1 (7%) responded with “indifferent or mildly satisfied”, and 1 (7%) responded with “quite dissatisfied”.

Q.6 Have the services you received helped you to deal more effectively with your problems? Of the 15 responses, 7 (47%) responded with “yes, they helped a great deal”, 6 (40%) responded with “yes, they helped”, and 2 (13%) responded with “no, they really didn’t help”. One of the participants responded with a 2.5. To record this response within the response categories provided, a 2 was most appropriate (Attkinson, 2012).

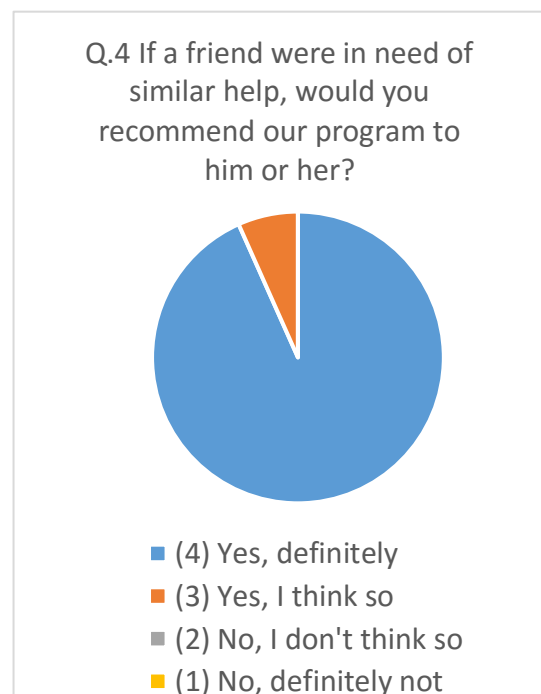
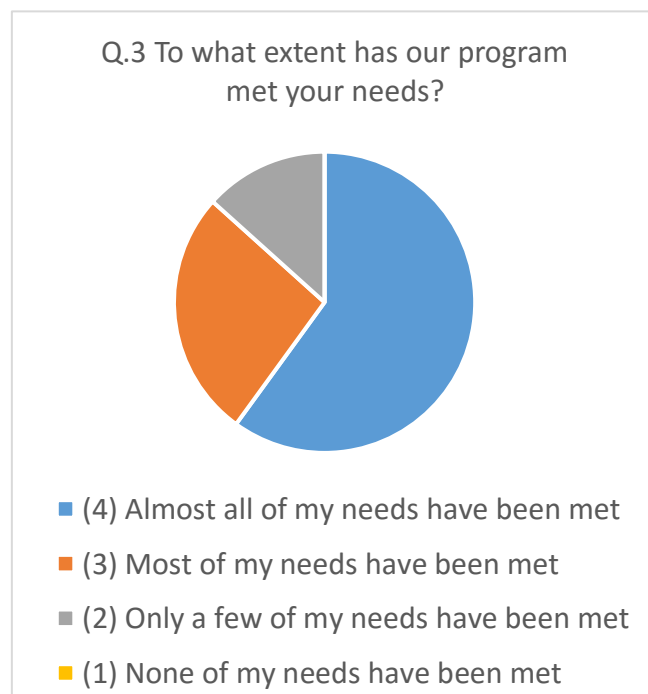
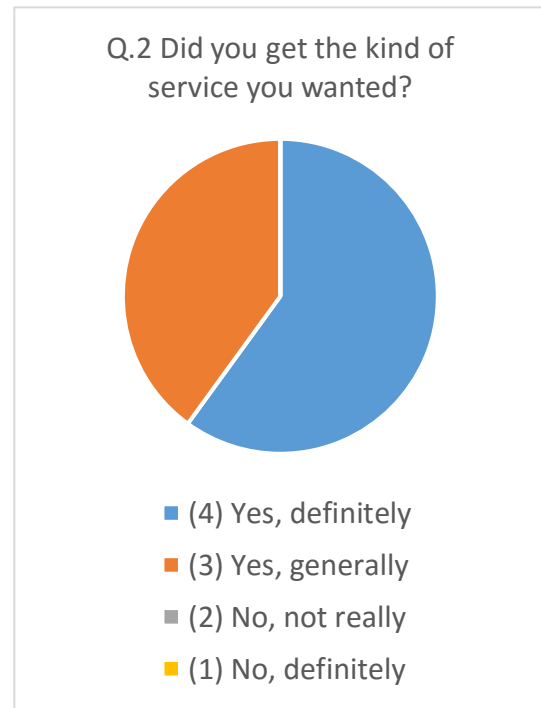
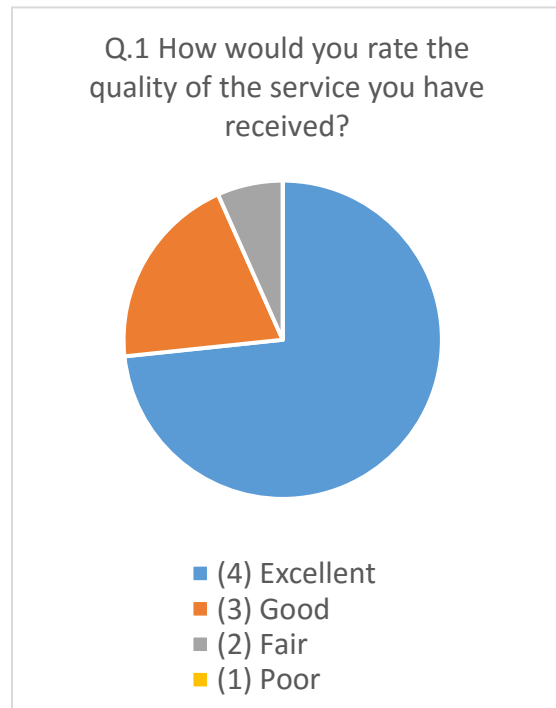
Q.7 In an overall, general sense, how satisfied are you with the service you have received? Of the 15 responses, 10 (67%) responded with “very satisfied” and 5 (33%) responded with “mostly satisfied”.

Q.8 If you were to seek help again, would you come back to our program? Of the 15 responses, 12 (80%) responded with “yes, definitely”, 2 (13%) responded with “yes, I think so”, 1 (7%) responded with “indifferent or mildly satisfied”, and 1 (7%) responded with “no, definitely not”.

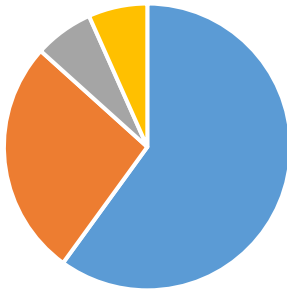
APPENDIX H

CSQ-8 Quantitative Results: Pie Charts

The figures provide a pie chart per question for the quantitative results from the CSQ-8.

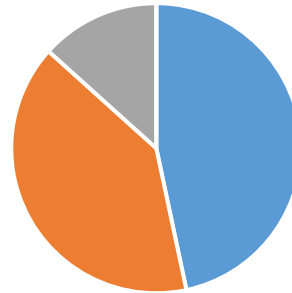


Q.5 How satisfied are you with the amount of service you have received?



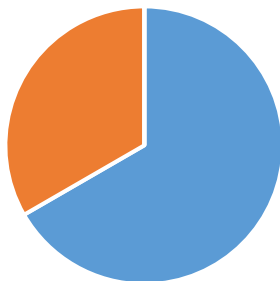
- (4) Very satisfied
- (3) Mostly satisfied
- (2) Indifferent or mildly dissatisfied
- (1) Quite dissatisfied

Q.6 Have the services you received helped you to deal more effectively with your problems?



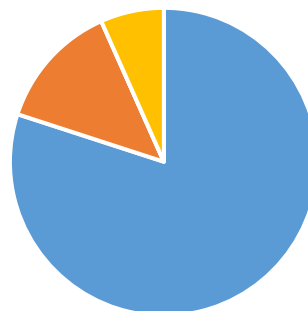
- (4) Yes, they helped a great deal
- (3) Yes, they helped
- (2) No, they really didn't help
- (1) No, they seemed to make things worse

Q.7 In an overall, general sense, how satisfied are you with the service you have received?



- (4) Very satisfied
- (3) Mostly satisfied
- (2) Indifferent or mildly dissatisfied
- (1) Quite dissatisfied

Q.8 If you were to seek help again, would you come back to our program?



- (4) Yes, definitely
- (3) Yes, I think so
- (2) No, I don't think so
- (1) No, definitely not

APPENDIX I

CSQ-8 Qualitative Results: Written Comments

The table provides the written comments marked on the CSQ-8's "comments" section.

Fourteen of the 15 participants chose to write a comment.

ID	CSQ-8: Written Comments
1	"This program has saved me many times from suicide. I've never had anything like this before"
2	"This is the first therapy in almost 12 years that I have actually enjoyed and felt safe to open up"
3	"Very impressed with the level of understanding and insight shown by the student, Maria Riddle. Also she has offered helpful suggestions that have been beneficial"
4	"I look forward to coming!"
5	"My 'negative' responses are not due to the program or my art therapist, but due to the way my brain works"
6	"I have been helped in working through my thoughts. Maria is very thoughtful and I appreciate her attitude. I have never been a big fan of counseling, but enjoy sharing my thoughts with her"
7	"Having the time to talk with someone objective and being able to do art projects is very calming. I always enjoyed art when I was young and getting to do it in a comfortable setting away from home is wonderful. It gives me great enjoyment. Thank you for Maria"
8	<ul style="list-style-type: none"> -Sometimes I feel like I don't have enough time to discuss a situation. -How does art help my problems or to find a solution – still not clear. -It was helpful when we came up with new ideas for me to work on my problems -It helped me realize all my art has a story including my feelings"
9	"I love the program especially drawing and talking! Love being here!"
10	"I need help dealing with work and home stress and Maria helps me see how I can try to balance first in my head and then in my actions. I have a lot of bad in my past that interferes in my present and my health of my legs makes things better or worse...I feel she is helping me with this in being creative with my hands and my mind! She is helping me cope – Thank you for this program!!!"

11	"I have only just started the program. I need more time to really answer these questions better"
12	<p>"1. Helped me to relax more (a real benefit) + (change focus)</p> <p>2. Helped in not being stuck in tunnel vision</p> <p>3. Helped in participating in activities that I have no prior experience doing</p> <p>4. Increased awareness that I do have the potential to help benefit others and it's not 'ALL ABOUT ME'"</p>
13	"I thought I'd be in a group setting at first. I thought there would be more options for 'doing art'. I hoped I'd be able to meet more than once a week and for longer periods of time. I expected more of a 'lab' experience and got a 'therapy' experience, which shouldn't have surprised me since it's called 'Art Therapy.' I enjoy the personality and interactions with the therapist – I trust her. I would hope to be a part of such a program the rest of my life. Art therapy as a lifestyle. Ha ha ha"
14	"I truly appreciate this intelligent, creative, professional approach. It is visionary, humane, and a counterbalance to the way therapy/medical care are typically compartmentalized. It is a joy to see more 'tools of the trade,' cross-pollination of neurology and psychology, plus neuroesthetics! I am personally benefited by working with Maria, appreciate seeing positive change with my friend at home (also in art therapy) AND I AM SO PROUD OF THE WORK BEING DEVELOPED HERE. Thank you, Thank you"
15	No Comment

APPENDIX J

Comparative Analysis Results: Number of Sessions, Frequency of Therapy, Diagnosis, PHQ-9 Scores, CSQ-8 Scores, and CSQ-8 Written Comments Per Participant

The table combines the results from the DCF, PHQ-9, and CSQ-8 for each participant. An identification (ID) number is provided to identify each participant. Information from the DCF includes, number of sessions, frequency, and diagnosis. “Number of Sessions” represents how many sessions the person had attended prior to partaking in the study. “Frequency” represents how often the participant was attending therapy: weekly, every other week, or monthly. “Diagnosis” indicates the diagnosis the participant noted on the DCF. “PHQ-9 Severity Score, IPD, and Difficulty” represent all the components from the PHQ-9 results. In this column, the severity score is the number, the identified provisional diagnosis (IPD) is either MDD, ODD, or NDD, and the difficulty is either not at all, somewhat, very, or extremely. “CSQ-8 Score” represents the score each participant had from the CSQ-8. Lastly, “CSQ-8: Written Comments” are the written comments from the CSQ-8.

A mean score was calculated for number of sessions, PHQ-9 severity score, and CSQ-8 score. The mean number of sessions attended was 11.73 with a range of 2 to 16. The mean PHQ-9 severity score is 12.4 with a range from 0 to 27. The mean CSQ-8 score is 28.67 with a range from 23 to 32.

ID	Number of Sessions	Frequency	Diagnosis	PHQ-9 Severity Score, IPD, Difficulty	CSQ-8 Score	CSQ-8: Written Comments
1	16	Every week	Depression, TBI	13, NDD, Somewhat	32	“I truly appreciate this intelligent, creative, professional approach. It is visionary, humane, and a counterbalance to the

						way therapy/medical care are typically compartmentalized. It is a joy to see more ‘tools of the trade,’ cross-pollination of neurology and psychology, plus neuroesthetics! I am personally benefited by working with Maria, appreciate seeing positive change with my friend at home (also in art therapy) AND I AM SO PROUD OF THE WORK BEING DEVELOPED HERE. Thank you, Thank you”
2	16	Every week	Anxiety	18, MDD, Somewhat	23	“My ‘negative’ responses are not due to the program or my art therapist, but due to the way my brain works”
3	11	Every other week	Depression, Anxiety	11, NDD, Somewhat	31	“Having the time to talk with someone objective and being able to do art projects is very calming. I always enjoyed art when I was young and getting to do it in a comfortable setting away from home is wonderful. It gives me great enjoyment. Thank you for Maria”
4	11	Every week	No Response	10, ODD, Somewhat	31	“Very impressed with the level of understanding and insight shown by the student, Maria Riddle. Also she has offered helpful suggestions that have been beneficial”
5	9	Every other week	No Response	6, NDD, Somewhat	24	“-Sometimes I feel like I don’t have enough time to discuss a situation.

						-How does art help my problems or to find a solution – still not clear. -It was helpful when we came up with new ideas for me to work on my problems -It helped me realize all my art has a story including my feelings”
6	8	Every week	Fibromyalgia, Muscular Dystrophy, Severe migraines	22, MDD, Extremely	31	“I look forward to coming!”
7	8	Every other week	No Response	10, NDD, Somewhat	27	“I love the program especially drawing and talking! Love being here!”
8	7	Monthly	Myasthenia Gravis	27, MDD, Extremely	32	“This program has saved me many times from suicide. I’ve never had anything like this before”
9	7	Every other week	Periodic Paralysis	0, NDD, No Response	32	“I need help dealing with work and home stress and Maria helps me see how I can try to balance first in my head and then in my actions. I have a lot of bad in my past that interferes in my present and my health of my legs makes things better or worse...I feel she is helping me with this in being creative with my hands and my mind! She is helping me cope – Thank you for this program!!!”
10	7	Every week	Parkinson’s Disease	1, NDD, Not at all	26*	“1. Helped me to relax more (a real benefit) + (change focus)

						<p>2. Helped in not being stuck in tunnel vision</p> <p>3. Helped in participating in activities that I have no prior experience doing</p> <p>4. Increased awareness that I do have the potential to help benefit others and it's not 'ALL ABOUT ME'"</p>
11	6	Every week	BPD, PTSD, MDD, Anxiety	20, MDD, No Response	32	"This is the first therapy in almost 12 years that I have actually enjoyed and felt safe to open up"
12	6	Every other week	Parkinson's Disease	14, MDD, Somewhat	31	No Comment
13	5	Every week	Bipolar, PTSD	9, NDD, Very	27	"I thought I'd be in a group setting at first. I thought there would be more options for 'doing art'. I hoped I'd be able to meet more than once a week and for longer periods of time. I expected more of a 'lab' experience and got a 'therapy' experience, which shouldn't have surprised me since it's called 'Art Therapy.' I enjoy the personality and interactions with the therapist – I trust her. I would hope to be a part of such a program the rest of my life. Art therapy as a lifestyle. Ha ha ha"
14	3	Every other week	Muscular Dystrophy	13, NDD, Somewhat	23	"I have only just started the program. I need more time to really answer these questions better"

15	2 & 4**	Every other week	No Response	12, MDD, Not at all	28	“I have been helped in working through my thoughts. Maria is very thoughtful and I appreciate her attitude. I have never been a big fan of counseling, but enjoy sharing my thoughts with her”
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*This participant’s CSQ-8 quantitative responses were not cohesive with written comments and overall ratings.

**This participant completed the PHQ-9 and DCF during session 2 and the CSQ-8 during session 4.

APPENDIX K

Comparative Analysis Results: FREQ Procedure

The FREQ Procedure tables contain data regarding significance of the different factors that were reported in this study. For a description of the tables see Table 16. Due to the low number of participants, all of the data does not show significant comparisons; however, the data still highlights some relevance to the patients experience with the program. The data will also be relevant when results from the PHQ-9 post-test are incorporated.

The components analyzed below include satisfaction, depressive severity, provisional depression diagnosis, number of sessions, and attendance. The indicators of “yes” or “no” in the tables below answer the following questions regarding each component analyzed. For satisfaction: Were the participant responses only marked on the CSQ-8 with “3” and “4”? For Identified Provisional Diagnosis (IPD) of Major Depressive Disorder (MDD) or Other Depressive Disorder (ODD): Did the results from the PHQ-9 indicate an IPD of MDD or ODD? For severity: Did the results from the PHQ-9 indicate a severity score greater than or equal to 15? For sessions: Did the participant attend 8 or more sessions prior to partaking in the study? For frequency: Did the participant attend therapy weekly?

Key for FREQ Procedure Tables

Variable A	Variable B		
	Yes	No	Total
Yes	Frequency of Yes and Yes Percent of N Percent of X	Frequency of Yes (Variable A) and No (Variable B) Percent of N Percent of X	Frequency of Yes (X) Percent of N
No	Frequency of No (Variable A) and Yes (Variable B) Percent of N Percent of Y	Frequency of No and No Percent of N Percent of Y	Frequency of No (Y) Percent of N
Total	Frequency of Yes Percent of N	Frequency of No Percent of N	Total number of participants (N) Total Percent

FREQ Procedure: Satisfaction Compared to IPD

Satisfaction	IPD		
	Yes	No	Total
Yes	6 40.00 60.00	4 26.67 40.00	10 66.67
No	1 6.67 20.00	4 26.67 80.00	5 33.33
Total	7 46.67	8 53.33	15 100.00

FREQ Procedure: Satisfaction Compared to Severity Scores

Satisfaction	Severity Score		
	Yes	No	Total
Yes	3 20.00 30.00	7 46.67 70.00	10 66.67
No	1 6.67 20.00	4 26.67 80.00	5 33.33
Total	4 26.67	11 73.33	15 100.00

FREQ Procedure: Satisfaction Compared to Number of Sessions

Satisfaction	Number of Sessions		
	Yes	No	Total
Yes	5	5	10
	33.33	33.33	66.67
	50.00	50.00	
No	2	3	5
	13.33	20.00	33.33
	40.00	60.00	
Total	7	8	15
	46.67	53.33	100.00

FREQ Procedure: Severity Scores Compared to Frequency of Therapy

Severity Score	Frequency		
	Yes	No	Total
Yes	3	1	4
	20.00	6.67	26.67
	75.00	25.00	
No	4	7	11
	26.67	46.67	73.33
	36.36	63.64	
Total	7	8	15
	46.67	53.33	100.00

FREQ Procedure: Satisfaction Compared to Frequency of Therapy

Satisfaction	Frequency		
	Yes	No	Total
Yes	4	6	10
	26.67	40.00	66.67
	40.00	60.00	
No	3	2	5
	20.00	13.33	33.33
	60.00	40.00	
Total	7	8	15
	46.67	53.33	100.00

FREQ Procedure: Severity Scores Compared to Number of Sessions

Severity Score	Number of Sessions		
	Yes	No	Total
Yes	2	2	4
	13.33	13.33	26.67
	50.00	50.00	
No	5	6	11
	33.33	40.00	73.33
	45.45	54.55	
Total	7	8	15
	46.67	53.33	100.00

FREQ Procedure: Severity Scores Compared to IPD

Severity Score	IPD		
	Yes	No	Total
Yes	4 26.67 100.00	0 0.00 0.00	4 26.67
No	3 20.00 27.27	8 53.33 72.73	11 73.33
Total	7 46.67	8 53.33	15 100.00

FREQ Procedure: Number of Sessions Compared to Frequency of Therapy

Number of Sessions	Frequency		
	Yes	No	Total
Yes	4 26.67 57.14	3 20.00 42.86	7 46.67
No	3 20.00 37.50	5 33.33 62.50	8 53.33
Total	7 46.67	8 53.33	15 100.00

FREQ Procedure: Number of Sessions Compared to IPD

Number of Sessions	IPD		
	Yes	No	Total
Yes	3 20.00 42.86	4 26.67 57.14	7 46.67
No	4 26.67 50.00	4 26.67 50.00	8 53.33
Total	7 46.67	8 53.33	15 100.00

FREQ Procedure: IPD Compared to Frequency of Therapy

IPD	Frequency		
	Yes	No	Total
Yes	4 26.67 57.14	3 20.00 42.86	7 46.67
No	3 20.00 37.50	5 33.33 62.50	8 53.33
Total	7 46.67	8 53.33	15 100.00